

#### Louisville Metro Air Pollution Control District 850 Barret Avenue Louisville, Kentucky 40204-1745



#### **Title V Operating Permit**

Permit No.: 151-97-TV (R3) Plant ID: 0283

Effective Date: 9/11/2013 Expiration Date: 9/30/2018

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Zeon Chemicals L.P. 4100 Bells Lane Louisville, KY 40211

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than six (6) months prior to the expiration date.

Application No. DM 57267 Application Received: 06/29/2006

05/19/2009 07/27/2011

Permit Writer: Stewart McCollam

Administratively Complete: 8/28/2006 Public Notice Date: 7/19/2013 Proposed Permit Date: 7/19/2013

> Air Pollution Control Officer September 11, 2013

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#### **Abbreviations and Acronyms**

ACM - Acrylic Co-Monomer AFS - AIRS Facility Subsystem

AIRS - Aerometric Information Retrieval System

AP-42 - AP-42, Compilation of Air Pollutant Emission Factors, published by USEPA

APCD - Louisville Metro Air Pollution Control District

atm - Atmosphere

BAC - Benchmark Ambient Concentration BACT - Best Available Control Technology

Btu - British thermal unit °C - Degrees Centigrade

CAAA - Clean Air Act Amendments (15 November 1990)

CEMS - Continuous Emission Monitoring System

CFR - Code of Federal Regulations

CO - Carbon Monoxide

District - Louisville Metro Air Pollution Control District

DOE - District Only Enforceable EA - Environmentally Acceptability

°F - Degrees Fahrenheit

EPPU - Elastomer Product Process Unit

gal - Gallon

GHG - Greenhouse Gas

HAP - Hazardous Air PollutantHCl - Hydrogen Chloride

Hg - Mercury
hr - Hour
in - Inches
lbs - Pounds
l - Liter

LMAPCD - Louisville Metro Air Pollution Control District MACT - Maximum Achievable Control Technology

MCPU - Miscellaneous Organic Chemical Manufacturing Process Unit

MM - Million

mmHg - Millimeter of mercury column height
MOCS - Management of Change System

MON - Miscellaneous Organic (Chemical Manufacturing)NAICS - North American Industry Classification System

NBR - Nitrile Butadiene Rubber

NOx - Nitrogen oxides

NSPS - New Source Performance Standards

NSR - New Source Review

OLD - Organic Liquids Distribution

PM - Particulate Matter

PM<sub>10</sub> - Particulate Matter less than 10 microns PM<sub>2.5</sub> - Particulate Matter less than 2.5 microns

PMP - Preventive Maintenance Plan

ppm - Parts per million

PSD - Prevention of Significant Deterioration

psia - pounds per square inch absolute

QA - Quality Assurance

RACT - Reasonably Available Control Technology

SAN - Styrene Acrylonitrile

SIC - Standard Industrial Classification

SIP - State Implementation Plan

SO<sub>2</sub> - Sulfur dioxide

STAR - Strategic Toxic Air Reduction

TAC - Toxic Air Contaminant

TPPU - Thermoplastic Product Process Unit

tpy - Tons per year

UTM - Universal Transverse MercatorVOC - Volatile Organic CompoundVOL - Volatile Organic Liquid

w.c. - water column

year - any period of twelve consecutive months, unless "calendar year" is specified year, or any 12 consecutive month period, as determined by context, unless

"calendar year" is specified

SWM 5 2013-09-11

#### **Preamble**

Title V of the Clean Air Act Amendments of 1990 (the Act) required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are: (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD or APCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations."

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit General Conditions define requirements that are generally applicable to all Title V companies under the jurisdiction of LMAPCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the General Conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The General Conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The owner or operator's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16 Section 1.23, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in Section 1.38 and Appendix A of District Regulation 1.02, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 Section 3.5.4.1.4.

Insignificant activities identified in Section 1.38 and Appendix A of District Regulation 1.02, shall comply with generally applicable requirements as required by Regulation 2.16 Section 4.1.9.4.

#### **General Conditions**

1. <u>Compliance</u> - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State, and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. [Regulation 2.16, Sections 4.1.3, 4.1.13.1, and 4.1.13.7]

2. <u>Compliance Certification</u> - The owner or operator shall certify, annually, or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, Sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification (Form 9400-O) directly to the EPA and to the District, as set forth in Regulation 2.16, Section 4.3.5.4, at the following addresses:

US EPA - Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-8960 Air Pollution Control District Room 205 850 Barret Ave Louisville, KY 40204-1745

This certification must be postmarked by 15 April of the year following the year for which the certification is being submitted, or other such due date as required by another applicable regulation.

- 3. <u>Compliance Schedule</u> The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A compliance schedule must meet the requirements of Regulation 2.16, Section 3.5.9.5. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 Section 4.3.4. The progress reports shall contain:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
  - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.

4. **<u>Duty to Supplement or Correct Application</u>** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, they shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, Section 3.4.

#### 5. Emergency Provision

- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - i. An emergency occurred and that the owner or operator can identify the cause of the emergency;
  - ii. The permitted facility was at the time being properly operated;
  - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
  - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. [Regulation 2.16, Sections 4.7.1 through 4.7.4]
- 6. <u>Emission Fees Payment Requirements</u> The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, Section 2. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. [Regulation 2.08, Section 2]
- 7. <u>Emission Offset Requirements</u> The owner or operator shall comply with the requirements of Regulation 2.04.
- 8. <u>Enforceability Requirements</u> Except for the conditions that are specifically designated as "District-Only Enforceable Conditions, all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. [Regulation 2.16, Sections 4.2.1 and 4.2.2]

#### 9. **Enforcement Action Defense**

a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. [Regulation 2.16, Sections 4.1.13.2 and 4.1.13.3]
- 10. <u>Hazardous Air Pollutants and Sources Categories</u> The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
- 11. <u>Information Requests</u> The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit.

  [Regulation 2.16, Section 4.1.13.6]

If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA at the address shown in General Condition 35b.

[Regulation 2.07, Section 10.2]

- 12. **Insignificant Activities** The owner or operator shall:
  - a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. [Regulation 2.16, Section 5]
  - b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. [Regulation 2.16, Section 4.3.5.3.6]
- 13. <u>Inspection and Entry</u> Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:

  [Regulation 2.16, Section 4.3.2]
  - a. Enter the premises to inspect any emissions-related activity or records required in this permit.
  - b. Have access to and copy records required by this permit.
  - c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
  - d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.

14. Monitoring and Related Record Keeping and Reporting Requirement - The owner or operator shall comply with the requirements of Regulation 2.16, Section 4.1.9. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period, unless specified elsewhere in this permit, shall be 1 January through 30 June and 1 July through 31 December of each calendar year. All reports shall be sent to the District at the address shown in paragraph 2 of these General Conditions and must be postmarked by the 60<sup>th</sup> day following the end of each reporting period, unless specified elsewhere in this permit. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All semi-annual compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a responsible official of the company.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

<u>Reporting Period</u> <u>Report Due Date</u>

January 1 - June 30 August 29

July 1 - December 31 March 1 of the following year

(February 29 for Leap Years)

If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.

15. <u>Off-permit Documents</u> - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5.

[Regulation 2.16, Section 4.1.5]

- 16. **Operational Flexibility** The owner or operator may make changes without permit revision in accordance with Regulation 2.16, Section 5.8.
- 17. **Permit Amendments (Administrative)** This permit can be administratively amended by the District in accordance with Regulation 2.16, Section 5.4.
- 18. **Permit Application Submittal** The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator

submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, Sections 3 and 5.2.

- 19. <u>Permit Duration</u> This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, Section 4.1.8.3.
- 20. **Permit Renewal, Expiration and Application** Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, Sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with Section 5.3.
- 21. <u>Permit Revisions</u> No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. [Regulation 2.16, Section 4.1.16]
- 22. **Permit Revision Procedures (Minor)** Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, Section 5.5.
- 23. **Permit Revision Procedures (Significant)** A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, Section 5.7, and all other applicable District Regulations.
- 24. **Permit Termination and Revocation by the District** The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, Section 5.11.1 through 5.11.6. For purposes of Section 5.11.1, substantial or unresolved noncompliance includes, but is not limited to:
  - a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment;
  - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District;
  - c. Knowingly making any false statement in any permit application;
  - d. Noncompliance with Regulation 1.07, Section 4.2; or
  - e. Noncompliance with KRS Chapter 77.
- 25. **Permit Shield** The permit shield shall apply in accordance with Regulation 2.16, Section 4.6.1.
- 26. **Prevention of Significant Deterioration of Air Quality** The owner or operator shall comply with the requirements of Regulation 2.05.

27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, Section 4.1.13.5.

- 28. <u>Public Participation</u> Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, Sections 5.1.1.2 and 5.5.4.
- 29. **Reopening For Cause** This permit shall be reopened and revised by the District in accordance with Regulation 2.16 Section 5.9.
- 30. **Reopening for Cause by EPA** This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 Section 5.10.
- 31. **Risk Management Plan (112(r))** For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
- 32. <u>Severability Clause</u> The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. [Regulation 2.16, Section 4.1.12]
- 33. <u>Stack Height Considerations</u> The owner or operator shall comply with the requirements of Regulation 2.10.
- 34. <u>Startups, Shutdowns, and Upset Conditions Requirements</u> The owner or operator shall comply with the requirements of Regulation 1.07.
- 35. Submittal of Reports, Data, Notifications, and Applications
  - a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 Sections 3.1, 3.3, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.12 shall be submitted to:

Air Pollution Control District Room #205 850 Barret Ave Louisville, KY 40204-1745

b. Documents that are specifically required to be submitted to EPA, as set forth in Regulation 2.16 Sections 3.3 and 5.8.5 shall be mailed to EPA at:

US EPA - Region IV APTMD - 12th floor Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-3104

36. Other Applicable Regulations - The owner or operator shall comply with all applicable requirements of the following: (See following page)

## **Federally Enforceable Regulations:**

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emissions Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Permit Requirements – Non-Title V Construction and Operating Permits and
2.03	Demolition/Renovation Permits
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use
	of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

# **District Only Enforceable Regulations:**

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors in the Ambient Air
2.08	Fees (Emission Fees, Permit Fees, and Permit Renewal Procedures)
5.00	Definitions (Standards for Toxic Air Contaminants and Hazardous Air Pollutants)
5.01	General Provisions (Standards for Toxic Air Contaminants and Hazardous Air Pollutants)
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants

37. <u>Stratospheric Ozone Protection Requirements</u> - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

- a. Any facility having any refrigeration equipment that normally contains fifty (50) pounds of refrigerant or more must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added, according to 40 CFR 82.166;
- b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
- d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40 CFR 82 Subpart A, Production and Consumption Controls. [Regulation 2.16, Section 4.1.5]

## **STAR Requirements**

DISTRICT ONLY ENFORCEABLE REGULATIONS				
Regulation	Title	<b>Applicable Sections</b>		
5.00	Definitions	1 through 2		
5.01	General Provisions	1 through 4		
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6		
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5		
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5		
5.23	Categories of Toxic Air Contaminants	1 through 6		

The owner or operator shall submit with the notification of construction for any new or modified individual STAR process/process equipment, the STAR EA Demonstration for all Category 1 through Category 4 TACs emitted from that new or modified individual Star process/process equipment.

The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 for all new and modified, and existing, individual STAR process/process equipment; 3.8 for all new and modified individual STAR process/process equipment; and 1.0 for each individual TAC from each individual STAR process/process equipment when a change occurs that increases emissions above *de minimis* or previously modeled values.

If the TAC does not have an established BAC or *de minimis* values, the owner or operator shall calculate and report these values. The form located on the APCD website (<a href="http://www.louisvilleky.gov/APCD">http://www.louisvilleky.gov/APCD</a>) may be used for determining BAC and *de minimis* values.

# **Title V Permit Revisions/Changes**

Revision No.	Issue Date	Public Notice Date	Туре	Attachment No. /Page No.	Description
N/A	Effective 12/30/2001	11/26/2000	Initial	Entire Permit	Initial Permit Issuance
R1 (Rev. 1)	03/15/2002	N/A	Administrative	U-ZN	Administrative changes made in response to Zeon's official request for Administrative changes dated January 14, 2001; and other company letters dated December 21, 2001 and March 7, 2002.
R2 (Rev. 2)	11/12/2002	N/A	Administrative	U-ZN	The conditions from 40 CFR Part 63 Subparts U and JJJ were added to the permit instead of being referenced
R3 (Rev. 3)	09/11/2013	07/19/2013	Renewal	Entire Permit	Scheduled Permit Renewal; Change of Responsible Official; Incorporation of Construction Permits; Miscellaneous Equipment and Insignificant Activities updated

Application #	Date	Туре
30455 (Permit 103-06-C)	1/30/2006	Construction permit application for one (1) Catalytic Thermal Oxidizer (C-PLY-TCO) controlling the Monomer Recovery System (MRS)
30456 (Permit 102-06-C)	1/30/2006	Construction permit application for one (1) Thermal Oxidizer (C-PLY-MRV-TO) with two (2) associated Buffer Tanks (TO-BTTK-1 and TO-BTTK-2)
30457 (Permit 170-06-C)	4/28/2006	Construction permit application for modification of Monomer Recovery System (MRS) consisting of adding one (1) 1600-gallon Knock-out Tank (TK-42F), one (1) Condenser (CN-43F), one (1) 750-gallon Separator Tank (TK-43F), two (2) 200-gallon Separator Tanks (TK-45F & TK-48F), and two (2) Vacuum Pumps (PU-43FA & PU-43FB)
30458 (Permit 183-07-C)	3/30/2007	Construction permit application for Kohler generator set, Model 500REOZVB, driven by a 757 Brake Horsepower (BHP) diesel engine. Generator set includes an internal 785 gallon diesel fuel tank.
30459 (Permit 175-08-C)	12/21/2007	Modification of One (1) existing 30-gallon Flash Tank (E-PCO-TK-11), make Parkson Industries, and one (1) existing Process Condenser (E-PCO-CN-1), make Patterson-Kelly; both located in the Liquid Rubber, or Pieco (PCO) sub-unit.
30460 (Permit 358-08-C)	4/09/2008	Construction application for one (1) Regenerative Thermal Oxidizer Control (C-SDR-2SDRTO) for control of existing Title V Emission Point E-SDR-2SD (No. 2 Spray Dryer) which also includes Title V Emission Points E-SDR-2SDCYC (No. 2 Spray Dryer Process Cyclone Separator) and E-SDR-2SDRP (No. 2 Spray Dryer Regular Packaging Station).
30461 (Permit 410-08-C)	5/15/2008	One (1) new replacement storage tank, designated as Tank TK-409, submerged fill vessel with 10,000 gallon capacity (Title V Emission Point E-TKF-TK-409)
30462 (Permit 67-10-C)	4/30/2010	Construction application for modification of No. 1 Spray Dryer Packaging System: E-SDR-1SDHPR-1, Product Hopper; E-SDR-1SDSCR-5, Screener; E-SDR-1SDHPR-4, Packaging Hopper; and E-SDR-1SDPKG, Packaging Station.
30463 (Permit 80-10-C)	6/04/2010	Construction permit application for installation of VOC Storage Tank, E-PLY-TK-307N, 4500 gallon capacity vessel equipped with submerged fill
34909 (Permit 34909-12-C)	4/16/2012	Construction permit application for installation of new Polymerizer, E-PLY-PLY-38

## **Emission Unit U-ZN:**

#### **U-ZN Description:**

Production of Synthetic Rubber, Latex, Resins and Pellets products consisting of Nitrile Butadiene Rubber (NBR), Nitrile Butadiene Latex, Styrene Acrylonitrile (SAN) Resin, and Acrylic Co-Monomer (ACM).

# **U-ZN Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS				
Regulation	Regulation Title			
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 2, 3, 4 & 5		
2.04	Construction or Modification of Major Sources in or Impacting upon Non-Attainment Areas (Emission Offset Requirements)	1 through 10		
5.15	Chemical Accident Prevention Provisions	1 through 2		
6.09	Standards of Performance for Existing Process Operations	1, 2, 3 & 5		
6.13	Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds	1, 2 & 3		
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	1, 2, 3 & 4		
6.24	Standard of Performance for Existing Sources Using Organic Materials	1, 2, 3.3, 4 & 5		

FEDERALLY ENFORCEABLE REGULATIONS				
Regulation	Title	Applicable Sections		
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4 & 20		
7.08	Standards of Performance for New Process Operations	1, 2 & 3		
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1, 2, 3, 7 & 8		
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4 & 5		
40 CFR Part 63 Subpart A	General Provisions	<b>§</b> 63.1 - <b>§</b> 63.16		
40 CFR Part 63 Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks [LDAR]	\$63.160 - \$63.183		
40 CFR Part 63 Subpart U	National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins [Known as Polymers and Resins I (Elastomers)]	<b>§</b> 63.480 - <b>§</b> 63.507		
40 CFR Part 63 Subpart JJJ	National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins [Known as Polymers and Resins IV (Thermoplastics)]	\$63.1310 - \$63.1336		
40 CFR Part 63 Subpart EEEE	National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)	§63.2330 - §63.2406		
40 CFR Part 63 Subpart FFFF	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing	§63.2430 - §63.2550		

FEDERALLY ENFORCEABLE REGULATIONS				
Regulation	Applicable Sections			
40 CFR Part 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	§63.6580 - §63.6675		
40 CFR Part 68	Chemical Accident Prevention Provisions	Subparts A - H		

DISTRICT ONLY ENFORCEABLE REGULATIONS				
Regulation	Regulation Title			
5.00	Definitions	1 & 2		
5.01	General Provisions	1 & 2		
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1, 2, 3, 4 & 5		
5.21	Environmental Acceptability for Toxic Air Contaminants	1, 2, 3, 4 & 5		
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1, 2, 3, 4, 5 & 6		
5.23	Categories of Toxic Air Contaminants	1, 2, 3, 4, 5 & 6		

## **Emission Unit U-ZN Emission Points:**

U-ZN Tank Farm (TKF) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
I HETEKHEOTTE	OLD MACT Transfer Racks  40 CFR Part 63 Subpart EEEE		Transfer racks only unloading organic liquids (no organic liquids loaded): Exempt from Subpart EEEE MACT Standard control requirements by function (only used for unloading)	NI/A	N/A	N/A N/A	N/A
		Transfer racks unloading and loading organic liquids: Exempt from Subpart EEEE MACT Standard control requirements by volume loaded (Total actual annual facility-level organic liquid loading volume through transfer rack is less than 800,000 gals)	(Closed System)				
E-TKF-100RCU	F_TK F_100RCH	Monomer Railcar Unloading	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A (Vapor Return Closed System) or	N/A or S-TKF-	
	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)	C-TKF-100CFU (Adsorber)	100CFU			
E-TKF-100TU	Monomer Truck Unloading	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A (Vapor Return Closed System) or	N/A or		
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)	C-TKF-100CFU (Adsorber)	S-TKF- 100CFU		

U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.13	Submerged fill (See Specific Condition S1.a.i)					
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
		40 CFR Part 63 Subpart U	Group 2 Storage Vessel (Vapor Pressure)					
E-TKF-TK-101 TK-10	Storage Tank TK-101	(When storing organic HAP–containing raw materials predominantly associated with NBR/nitrile butadiene latex production)	(Capacity greater than or equal to 75 m <sup>3</sup> (19,815 gallons) but less than 151 m <sup>3</sup> (39,894.2 gallons), and maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mmHg))	N/A	S-TKF-TK-			
	(Bottom Fill)	40 CFR Part 63 Subpart JJJ (When storing organic HAP-containing raw materials predominantly associated with SAN resin production)	Exempt by Contents  (Storage vessel containing styrene at an existing affected source)	N/A	101			
	40 CFR Part 63 Subpart FFFF (When storing organic HAP-containing raw materials predominantly associated with ACM production)	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))						

	U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.13	Submerged fill (See Specific Condition S1.a.i)						
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)						
		40 CFR Part 63 Subpart U	Group 2 Storage Vessel (Vapor Pressure)		S-TKF-TK- 102				
E-TKF-TK-102  Storage Tank TK-102 (Bottom Fill)	Storage Tank TK-102	(When storing organic HAP–containing raw materials predominantly associated with NBR/nitrile butadiene	(Capacity greater than or equal to 75 m <sup>3</sup> (19,815 gallons) but less than 151 m <sup>3</sup> (39,894.2 gallons), and maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mmHg))	N/A					
	(Bottom Fill)	40 CFR Part 63 Subpart JJJ (When storing organic HAP-containing raw materials predominantly associated with SAN resin production)	Exempt by Contents  (Storage vessel containing styrene at an existing affected source)						
		(When storing organic HAP-containing raw materials predominantly	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))						

U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.13	Submerged fill (See Specific Condition S1.a.i)					
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-TKF-TK-103 TK-103		40 CFR Part 63 Subpart U (When storing organic HAP–containing raw materials predominantly associated with NBR/nitrile butadiene latex production)	Group 2 Storage Vessel (Vapor Pressure)  (Capacity greater than or equal to 75 m³ (19,815 gallons) but less than 151 m³ (39,894.2 gallons), and maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mmHg))	N/A	S-TKF-TK- 103			
	(Bottom Fill)	(Bottom Fill)  40 CFR Part 63 Subpart JJJ (When storing organic HAP-containing raw materials	Exempt by Contents  (Storage vessel containing styrene at an existing affected source)	-	103			
	Subpart FFFF (When storing orgated HAP-containing restaurable) materials predominantly associated with AG	(When storing organic HAP-containing raw	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))					

U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.13	Submerged fill (See Specific Condition S1.a.i)					
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-TKF-TK-104 TK-104		40 CFR Part 63 Subpart U (When storing organic HAP–containing raw materials predominantly associated with NBR/nitrile butadiene latex production)	Group 2 Storage Vessel (Vapor Pressure)  (Capacity greater than or equal to 75 m³ (19,815 gallons) but less than 151 m³ (39,894.2 gallons), and maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mmHg))	N/A	S-TKF-TK- 104			
	(Bottom FIII)	HAP-containing raw materials	Exempt by Contents  (Storage vessel containing styrene at an existing affected source)					
	(When storing organic HAP-containing raw materials predominantly	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))						

U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.13	Submerged fill (See Specific Condition S1.a.i)					
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-TKF-TK-105 TK-105		40 CFR Part 63 Subpart U (When storing organic HAP–containing raw materials predominantly associated with NBR/nitrile butadiene latex production)	Group 2 Storage Vessel (Vapor Pressure)  (Capacity greater than or equal to 75 m³ (19,815 gallons) but less than 151 m³ (39,894.2 gallons), and maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mmHg))	N/A	S-TKF-TK- 105			
	(Bottom Fill)	(Bottom Fill)  40 CFR Part 63 Subpart JJJ (When storing organic HAP-containing raw materials	Exempt by Contents  (Storage vessel containing styrene at an existing affected source)		103			
	40 CFR Part 63 Subpart FFFF (When storing organic HAP-containing raw materials predominantly associated with ACM production)	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))						

U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable		S-TKF-TK-			
		6.13	Submerged fill (See Specific Condition S1.a.i)					
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-TKF-TK-106 Tk		40 CFR Part 63 Subpart U (When storing organic	Group 2 Storage Vessel (Vapor Pressure)					
	Storage Tank TK-106	HAP—containing raw materials predominantly associated with NBR/nitrile butadiene latex production)	(Capacity greater than or equal to 75 m <sup>3</sup> (19,815 gallons) but less than 151 m <sup>3</sup> (39,894.2 gallons), and maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mmHg))	N/A				
	(Submerged Fill)  40 CFR Part 63 Subpart JJJ (When storing organic HAP-containing raw materials predominantly associated with SAN resin production)  40 CFR Part 63 Subpart FFFF (When storing organic HAP-containing raw materials predominantly associated with ACM	Exempt by Contents  (Storage vessel containing styrene at an existing affected source)	-	106				
		Subpart FFFF (When storing organic HAP-containing raw materials predominantly	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))					

U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.13	Submerged fill (See Specific Condition S1.a.i)					
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-TKF-TK-107		40 CFR Part 63 Subpart U (When storing organic	Group 2 Storage Vessel (Vapor Pressure)  (Capacity greater than or equal to 75 m <sup>3</sup>					
	Storage Tank TK-107	HAP-containing raw materials predominantly associated with NBR/nitrile butadiene latex production)	(19,815 gallons) but less than 151 m <sup>3</sup> (39,894.2 gallons), and maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mmHg))	N/A	S-TKF-TK- 107			
	(Submerged Fill)  40 CFR Part 63 Subpart JJJ (When storing organic HAP-containing raw materials predominantly associated with SAN resin production)  40 CFR Part 63 Subpart FFFF (When storing organic HAP-containing raw materials predominantly associated with ACM	Exempt by Contents  (Storage vessel containing styrene at an existing affected source)		107				
		Subpart FFFF (When storing organic HAP-containing raw materials predominantly	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))					

U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable		S-TKF-TK-			
		6.13	Submerged fill (See Specific Condition S1.a.i)					
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-TKF-TK-108 TK		40 CFR Part 63 Subpart U (When storing organic	Group 2 Storage Vessel (Vapor Pressure)					
	Storage Tank TK-108	HAP—containing raw materials predominantly associated with NBR/nitrile butadiene latex production)	(Capacity greater than or equal to 75 m <sup>3</sup> (19,815 gallons) but less than 151 m <sup>3</sup> (39,894.2 gallons), and maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mmHg))	N/A				
	(Submerged Fill)  40 CFR Part 63 Subpart JJJ (When storing organic HAP-containing raw materials predominantly associated with SAN resin production)  40 CFR Part 63 Subpart FFFF (When storing organic HAP-containing raw materials predominantly associated with ACM	Exempt by Contents  (Storage vessel containing styrene at an existing affected source)		108				
		Subpart FFFF (When storing organic HAP-containing raw materials predominantly	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))	ı				

U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
		7.12	Submerged fill (See Specific Condition S1.a.i)					
E-TKF-TK-109  Storage Tank TK-109 (Submerged Fill		40 CFR Part 63 Subpart U (When storing organic HAP–containing raw materials predominantly associated with NBR/nitrile butadiene latex production)	Group 2 Storage Vessel (Capacity)  (Capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons), and may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature)	N/A	S-TKF-TK- 109			
	(Submerged Fill)	40 CFR Part 63 Subpart JJJ (When storing organic HAP-containing raw materials predominantly associated with SAN resin production)	Exempt by Contents  (Storage vessel containing styrene at an existing affected source)		109			
	Su (When HAP- pro associ	40 CFR Part 63 Subpart FFFF (When storing organic HAP-containing raw materials predominantly associated with ACM production)	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))					

U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
E-TKF-400U	E-TKF-400U Bulk Material Unloading	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
Omodanig	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)	-					
		6.13	Submerged fill (See Specific Condition S1.a.i)					
	Storage Tank	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)		C THE TH			
E-TKF-TK-401	TK-401 (Bottom Fill)	40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Group 2 Storage Vessel (Capacity)  (Capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons), and may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature)	N/A	S-TKF-TK- 401			

U-ZN Tank Farm (TKF) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		6.13	Submerged fill (See Specific Condition S1.a.i)					
	Storage Tank	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-TKF-TK-402	TK-402 (Bottom Fill)	4,133 lbs. (See Specific Condition S1.a.iii)  4,133 lbs. (See Specific Condition S1.a.iii)  Group 2 Storage Vessel (Capacity)  (Capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons), and may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature)  6.43 Section 20  Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)	N/A	S-TKF-TK- 402				
		6.43 Section 20						
	(Wh	7.12	Exempt from Equipment standard due to vapor pressure (True vapor pressure of the VOC as stored is less than 1.5 psia)	N/A	S-TKF-TK- 403			
E-TKF-TK-403		40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Group 2 Storage Vessel (Capacity)  (Capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons), and may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature)					

U-ZN Tank Farm (TKF) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		6.13	Submerged fill (See Specific Condition S1.a.i)				
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				
E-TKF-TK-404	Storage Tank TK-404 (Bottom Fill)	Storage Tank TK-404 (Bottom Fill)  40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)  40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)  (Capacity greater than or equal to 75 (19,815 gallons) but less than 151 (39,894.2 gallons), and maximum true va pressure of the total organic HAP at stor temperature is less than 13.1 kPa (98 mmHg))	(Capacity greater than or equal to 75 m <sup>3</sup> (19,815 gallons) but less than 151 m <sup>3</sup> (39,894.2 gallons), and maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24)	N/A	S-TKF-TK- 404		
		6.13	Submerged fill (See Specific Condition S1.a.i)				
	Storage Tank	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				
E-TKF-TK-405  Storage Tank TK-405 (Bottom Fill)	40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Group 2 Storage Vessel (Capacity)  (Capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons), and may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature)	N/A	S-TKF-TK- 405			

U-ZN Tank Farm (TKF) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
E-TKF-TK-406	Storage Tank TK-406 (Bottom Fill)	6.13	Submerged fill (See Specific Condition S1.a.i)	N/A	S-TKF-TK- 406		
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				
		40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Group 2 Storage Vessel (Capacity)  (Capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons), and may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature)				
E-TKF-TK-407	Storage Tank TK-407 (Bottom Fill)	6.13	Submerged fill (See Specific Condition S1.a.i)	N/A	S-TKF-TK- 407		
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				
		40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Group 2 Storage Vessel (Capacity)  (Capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons), and may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature)				

U-ZN Tank Farm (TKF) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
E-TKF-TK-408	Storage Tank TK-408 (Top Fill)	6.13	Exempt from Equipment standard due to vapor pressure (True vapor pressure of the VOC as stored is less than 1.5 psia)	N/A	S-TKF-TK- 408		
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				
		40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Group 2 Storage Vessel (Capacity)  (Capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons), and may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature)				
E-TKF-TK-409	Storage Tank TK-409 (Submerged Fill)	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)	N/A	S-TKF-TK- 409		
		7.12	Submerged fill (See Specific Condition S1.a.i)				
		40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Exempt by Definition of Storage Vessel (Capacity less than 38 m³ (10,039.6 gallons))				

U-ZN Tank Farm (TKF) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
E-TKF-TK-410	Storage Tank TK-410 (Bottom Fill)	6.13	Submerged fill (See Specific Condition S1.a.i)	N/A	S-TKF-TK- 410		
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				
		40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Group 2 Storage Vessel (Vapor Pressure)  (Capacity greater than or equal to 75 m³ (19,815 gallons) but less than 151 m³ (39,894.2 gallons), and maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mmHg))				
E-TKF-TK-411	Storage Tank TK-411 (Top Fill)	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)	N/A	S-TKF-TK- 411		
		7.12	Exempt from equipment standard due to vapor pressure (True vapor pressure of the VOC as stored is less than 1.5 psia)				
		40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Exempt by Definition of Storage Vessel (Capacity less than 38 m <sup>3</sup> (10,039.6 gallons))				

	U-ZN Tank Farm (TKF) Sub-Unit									
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference					
Storage Tan		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)							
	Storage Tank	7.12	Exempt from equipment standard due to vapor pressure (True vapor pressure of the VOC as stored is less than 1.5 psia)		S-TKF-TK-					
E-TKF-TK-412	TK-412 (Top Fill)	40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Group 2 Storage Vessel (Capacity)  (Capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons), and may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature)	N/A	412					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-PLY-PAMU	Monomer Unloading	7.25 Section 3.2	Pre-December 16, 1987 installation: Annual VOC emissions shall not exceed 0.359 TPY (See Specific Condition S1.a.iv(1))	N/A	F			
		5.21	Environmentally Acceptable					
	Storage Tank TK-307N (Submerged Fill)	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)	N/A	S-PLY-TK- 307			
E-PLY-TK-307N		7.12	Submerged fill (See Specific Condition S1.a.i)					
		40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Exempt by Definition of Storage Vessel (Capacity less than 38 m³ (10,039.6 gallons))					
		6.13	Submerged fill (See Specific Condition S1.a.i)					
E-PLY-TK-304	Storage Tank TK-304	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)	N/A	S-PLY-TK-			
EIEI IN SUF	(Submerged Fill)	40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Exempt by Definition of Storage Vessel (Capacity less than 38 m³ (10,039.6 gallons))		304			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		6.13	Submerged fill (See Specific Condition S1.a.i)					
E-PLY-TK-305	Storage Tank TK-305	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)	N/A	S-PLY-TK-			
E-PLY-TK-305 TK-305 (Submerged Fill)	40 CFR Part 63 Subpart U (When storing organic HAP-containing raw materials)	Exempt by Definition of Storage Vessel (Capacity less than 38 m³ (10,039.6 gallons))	, N/A	305				
	Storage Tank TK-306	6.13	Submerged fill (See Specific Condition S1.a.i)	N/A	S-PLY-TK- 306			
E-PLY-TK-306		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
BIBI IN 300	(Submerged Fill)		Exempt by Definition of Storage Vessel (Capacity less than 38 m³ (10,039.6 gallons))					
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-PLY-TK-150	Storage Tank TK-150 (Top Fill)	7.12	Exempt from equipment standard due to vapor pressure (True vapor pressure of the VOC as stored is less than 1.5 psia)	N/A	S-PLY-TK- 150			
	(10) 1,	40 CFR Part 63 Subpart EEEE	Exempt from Subpart EEEE MACT Standard control requirements by capacity (Capacity is less than 18.9 m <sup>3</sup> (5,000 gals).)					

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				
E-PLY-TK-152	Storage Tank TK-152 (Top Fill)	7.12	Exempt from Equipment standard due to vapor pressure (True vapor pressure of the VOC as stored is less than 1.5 psia)	N/A	S-PLY-TK- 152		
	(Top Fill)	40 CFR Part 63 Subpart EEEE	Exempt from Subpart EEEE MACT Standard control requirements by capacity (Capacity is less than 18.9 m <sup>3</sup> (5,000 gals).)				
E-PLY-SPT-1	No. 1 Soap Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F		
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				
E-PLY-SPT-2	No. 2 Soap Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F		
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition <u>\$1.a.iii</u> )				
E-PLY-SPT-3	No. 3 Soap Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F		
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				

	U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
E-PLY-SPT-4	No. 4 Soap Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-PLY-SPT-5	No. 5 Soap Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-PLY-SPT-6	No. 6 Soap Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-PLY-SPT-7	No. 7 Soap Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
E-PLY-SPT-8	No. 8 Soap Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F		
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				
	Tank TK-14G	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)		F		
E-PLY-TK-14G		7.25	Source-Wide Cumulative VOC PTE ≤ 5 TPY for non-VOC BACT Emission Points (See Specific Condition S1.a.iv.(2))	N/A			
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)				
E-PLY-TK-15G Ta	Tank TK-15G	7.25	Source-Wide Cumulative VOC PTE ≤ 5 TPY for non-VOC BACT Emission Points (See Specific Condition S1.a.iv.(2))	N/A	F		
	Tank TK-16G	6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)	N/A			
E-PLY-TK-16G		7.25	Source-Wide Cumulative VOC PTE ≤ 5 TPY for non-VOC BACT Emission Points (See Specific Condition S1.a.iv.(2))		F		

	U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
E-PLY-TK-26	Tank TK-26	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-PLY-MTK-101	Tank TK-101	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
E-PLY-MTK-101 Tank		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-PLY-MTK-102	Tank TK-102	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					
E-PLY-TK-113	Tank TK-113	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
		6.43 Section 20	Daily plant-wide VOC Emissions cap of 4,133 lbs. (See Specific Condition S1.a.iii)					

	U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
E-PLY-PLY-1  Polymerizer No. 1  Polymerizer No. 1  6.24  emissions reduction averaged month for all Regulation Points. (See Specific Condition Points)  Baily plant-wide VOC er 4,133 lbs (See Specific Condition Points)  Group 2 batch front-end properties annual emissions of organical subpart U  40 CFR Part 63 Subpart U  11,800 kg/yr (26,019 lbs/yr)	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO				
	No. 1	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>					
	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions								
		5.21	Environmentally Acceptable						
E-PLY-PLY-2	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or,				
	No. 2	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		S-PLY-MRV- TO or S-PLY-TCO				
		40 CFR Part 63	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions						

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO			
E-PLY-PLY-3	No. 3	•	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	Recovery System) and MRS Vent				
	4,133 lbs (See Specific C Group 2 batch front-end annual emissions of orga Subpart U 11,800 kg/yr (26,019 lbs.	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions	Control System <sup>1</sup>					
		5.21	Environmentally Acceptable	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>				
	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-PLY-PVJ, or,			
E-PLY-PLY-4	No. 4	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		S-PLY-MRV- TO or S-PLY-TCO			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO			
E-PLY-PLY-5	No. 5	•	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	Recovery System) and MRS Vent				
40 CFR Part 60 Subpart U	40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions	Control System <sup>1</sup>					
		5.21	Environmentally Acceptable		S-PLY-PVJ, or,			
Polymo	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>				
E-PLY-PLY-6	No. 6	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		S-PLY-MRV- TO or S-PLY-TCO			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					

	U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
E-PLY-PLY-7	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV-				
	No. /	No. 7 6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>	TO or S-PLY-TCO				
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions						
		5.21	Environmentally Acceptable						
E-PLY-PLY-8	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO				
	No. 8	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)						
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions						

	U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
E.PI V.PI V.Q	month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer	S-PLY-PVJ, or,						
E-PLY-PLY-9	No. 9	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	Recovery System) and MRS Vent	S-PLY-MRV- TO or S-PLY-TCO				
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions	Control System <sup>1</sup>					

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-PLY-10	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	No. 10	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-PLY-11	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	No. 11	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)				
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-PLY-12	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	No. 12	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-PLY-13	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	No. 13	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
1 H_PI Y_PI Y_1/I 1	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO			
	No. 14	No. 14 6.43 Section 20 40 CFR Part 63 Subpart U	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>				
			Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					
		5.21	Environmentally Acceptable					
E-PLY-PLY-15	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-			
	No. 15	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-PLY-16	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	No. 16	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-PLY-17	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	No. 17	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
E-PLY-PLY-18	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO			
	No. 18	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>				
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions	Control System				
		5.21	Environmentally Acceptable					
E-PLY-PLY-19	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO			
	No. 19	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-PLY-20	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	No. 20	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-PLY-21	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	No. 21	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO			
	No. 22	No. 22 6.43 Section 20 40 CFR Part 63 Subpart U	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>				
			Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					
		5.21	Environmentally Acceptable					
E-PLY-PLY-23	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-			
	No. 23	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-PLY-24	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	No. 24	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-PLY-25	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	No. 25	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-PLY-26	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	No. 26	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-PLY-27	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	No. 27	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-PLY-28	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	No. 28	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-PLY-29	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	No. 29	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-PLY-30	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	No. 30	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-PLY-31	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-PLY-PVJ		
	No. 31	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)				
		40 CFR Part 63 Subpart JJJ	Group 2 batch process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-PLY-32	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	No. 32	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-PLY-33	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	No. 33	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
1 H_PI Y_PI Y_3/I I	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO			
	No. 34	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>				
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					
		5.21	Environmentally Acceptable					
E-PLY-PLY-35	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-			
	No. 35	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					

	U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
E-PLY-PLY-36	Polymerizer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO			
212112130	No. 36	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent				
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions	Control System <sup>1</sup>				
		5.21	Environmentally Acceptable					
E-PLY-BDTTK-1	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-			
	BDTTK-1	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-2	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	BDTTK-2	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-3	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	BDTTK-3	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-4	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	BDTTK-4	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-5	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	BDTTK-5	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

	U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
E-PLY-BDTTK-6	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO			
	BDTTK-6	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>				
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					
		5.21	Environmentally Acceptable					
E-PLY-BDTTK-7	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-			
	BDTTK-7	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions					

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-10	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	BDTTK-10	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable		S-PLY-PVJ, or, S-PLY-MRV-		
E-PLY-BDTTK-11	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>			
	BDTTK-11	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-12	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	BDTTK-12	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions	Control System			
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-14	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	BDTTK-14	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-15	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	BDTTK-15	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-16	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	BDTTK-16	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-17	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery	S-PLY-PVJ, or, S-PLY-MRV- TO or S-PLY-TCO		
	BDTTK-17	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	System) and MRS Vent Control System <sup>1</sup>			
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				
		5.21	Environmentally Acceptable				
E-PLY-BDTTK-18	Blowdown Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A, or, C-PLY-MRS (Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY-PVJ, or, S-PLY-MRV-		
	BDTTK-18	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)		TO or S-PLY-TCO		
		40 CFR Part 63 Subpart U	Group 2 batch front-end process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
E-PLY-TK-103C  Tank TK-103C  (Formerly Tank TO-113)	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
		7.25	VOC BACT (APCD deemed VOC BACT based on May 12, 1995 Permit Application) (See Specific Condition S1.a.iv.(3))				
	(Formerly		Emission Point is part of MCPU, but does not process organic HAP ( <i>i.e.</i> , not a batch process vent).	N/A	S-PLY-TK- 103C		
		40 CFR Part 63 Subpart FFFF	No applicable emission standard or work practice standard.				
			Subject only to applicable notification, reporting, and recordkeeping requirements specified in 40 CFR 63.2515, 40 CFR 63.2520, and 40 CFR 63.2525				

U-ZN Polymerization (PLY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		5.21	Environmentally Acceptable				
E-PLY-TK-101	Pre-Mix Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	C-PLY-TCO (Thermal	S-PLY-TCO		
ETET THE TOT	TK-101	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	Catalytic Oxidizer)			
		40 CFR Part 63 Subpart FFFF	Group 2 batch process vent (Collective uncontrolled organic HAP emissions from all batch process vents are less than 10,000 lbs/yr)				
		5.21	Environmentally Acceptable		S-PLY-TCO		
E-PLY-TK-102	Pre-Mix Tank	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	C-PLY-TCO (Thermal Catalytic Oxidizer)			
E-PLY-1K-102	TK-102	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)				
		40 CFR Part 63 Subpart FFFF	Group 2 batch process vent (Collective uncontrolled organic HAP emissions from all batch process vents are less than 10,000 lbs/yr)				

	U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	C-PLY-TCO					
E-PLY-PLY-37	Polymerizer No. 37	•	VOC BACT (APCD deemed VOC BACT based on May 12, 1995 Permit Application) (See Specific Condition S1.a.iv.(3))	(Thermal Catalytic Oxidizer)	S-PLY-TCO				
		40 CFR Part 63 Subpart FFFF	Group 2 batch process vent (Collective uncontrolled organic HAP emissions from all batch process vents are less than 10,000 lbs/yr)						
		5.21	Environmentally Acceptable						
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	C-PLY-TCO (Thermal Catalytic Oxidizer)	S-PLY-TCO				
E-PLY-PLY-38	Polymerizer No. 38	7.25	VOC BACT (June 4, 2012 VOC BACT Analysis by URS Corporation) (See Specific Condition S1.a.iv.(3))						
		40 CFR Part 63 Subpart FFFF	Group 2 batch process vent (Collective uncontrolled organic HAP emissions from all batch process vents are less than 10,000 lbs/yr)						

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
E-PLY-CN- 101/2/VP	2 Barometric Condensers/ Separators	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points- (See Specific Condition S1.a.ii)	C-PLY-TCO (Thermal				
	(CN-101 and CN-102) and Vacuum Pump	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition \$1.a.iii)	Catalytic Oxidizer)	S-PLY-TCO			
		40 CFR Part 63 Subpart FFFF	Group 2 batch process vent (Collective uncontrolled organic HAP emissions from all batch process vents are less than 10,000 lbs/yr)					
	Blend Tank BLTTK-13	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-PLY- BLTTK- 13/14/15/16/			
E-PLY-BLTTK-13		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition <u>\$1.a.iii</u> )					
E-PLY-BLIIK-13		40 CFR Part 63 Subpart FFFF	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))		17/18			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-BLTTK-14	Blend Tank BLTTK-14	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- BLTTK- 13/14/15/16/ 17/18			
E-PLI-DLIIK-14	DLIIK-14	40 CFR Part 63 Subpart FFFF	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-BLTTK-15	Blend Tank BLTTK-15	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- BLTTK- 13/14/15/16/			
E-FL1-BL11K-13	BLIIK-15	40 CFR Part 63 Subpart FFFF	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))		17/18			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-BLTTK-16	Blend Tank BLTTK-16	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- BLTTK- 13/14/15/16/ 17/18			
E-FL1-BL11K-10	BLIIK-10	40 CFR Part 63 Subpart FFFF	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-BLTTK-17	Blend Tank BLTTK-17	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- BLTTK- 13/14/15/16/			
E-ILI-BETTK-17	BLIIK-I/	40 CFR Part 63 Subpart FFFF	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))		17/18			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-BLTTK-18	Blend Tank BLTTK-18	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- BLTTK- 13/14/15/16/ 17/18			
E-FLT-BLTTK-10	BLIIK-10	40 CFR Part 63 Subpart FFFF	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))	-				
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-BLTTK-19	Blend Tank BLTTK-19	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- BLTTK-			
ETET-BETTK-1)	BLIIK-19	40 CFR Part 63 Subpart FFFF	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))		19/20			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-PLY- BLTTK- 19/20			
E-PLY-BLTTK-20	Blend Tank BLTTK-20	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-PLY- BLTTK- 21/22/23/24/			
E-PLY-BLTTK-21	Blend Tank BLTTK-21	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))		25/26			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-BLTTK-22	Blend Tank BLTTK-22	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- BLTTK- 21/22/23/24/			
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))		25/26			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-PLY- BLTTK- 21/22/23/24/			
E-PLY-BLTTK-23	Blend Tank BLTTK-23	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition \$1.a.iv.(2))		25/26			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-PLY- BLTTK- 21/22/23/24/			
E-PLY-BLTTK-24	Blend Tank BLTTK-24	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition \$1.a.iv.(2))		25/26			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-BLTTK-25	Blend Tank BLTTK-25	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- BLTTK- 21/22/23/24/			
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))		25/26			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-PLY- BLTTK- 21/22/23/24/ 25/26			
E-PLY-BLTTK-26	Blend Tank BLTTK-26	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
E-PLY-BLTTK-26		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition \$\frac{\text{S1.a.iv.(2)}}{\text{S1.a.iv.(2)}}					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition \$\frac{\mathbf{S1.a.ii}}{2}\$)		S-PLY-			
E-PLY-BLTTK-27	Blend Tank BLTTK-27	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition \$1.a.iii)	N/A	BLTTK- 27/28/29/30			
		40 CFR Part 63 Subpart FFFF	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))					
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-PLY-			
E-PLY-BLTTK-28	Blend Tank BLTTK-28	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	BLTTK- 27/28/29/30			
			Group 2 Storage Tank (Vapor Pressure)					
		40 CFR Part 63 Subpart FFFF	(Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-PLY- BLTTK- 27/28/29/30			
E-PLY-BLTTK-29	Blend Tank BLTTK-29	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
		40 CFR Part 63 Subpart FFFF	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-PLY- BLTTK- 27/28/29/30			
E-PLY-BLTTK-30	Blend Tank BLTTK-30	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
		40 CFR Part 63 Subpart FFFF	Group 2 Storage Tank (Vapor Pressure)  (Capacity greater than or equal to 10,000 gallons, and stores material that has a maximum true vapor pressure of total HAP less than 6.9 kPa (51.74 mmHg))					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-PLY- BLTTK- 31/32/33/34			
E-PLY-BLTTK-31	Blend Tank BLTTK-31	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition \$1.a.iv.(2))		31/32/33/34			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-PLY- BLTTK- 31/32/33/34			
E-PLY-BLTTK-32	Blend Tank BLTTK-32	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
E-PLY-BLTTK-32		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-BLTTK-33	Blend Tank BLTTK-33	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- BLTTK- 31/32/33/34			
1 E-bi A-bi J-LK-33 1 =		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))		31/32/33/34			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
	5.21	Environmentally Acceptable						
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-PLY- BLTTK- 31/32/33/34			
E-PLY-BLTTK-34	Blend Tank BLTTK-34	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-PLY- BLTTK- 35/36/37			
E-PLY-BLTTK-35	Blend Tank BLTTK-35	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-BLTTK-36	Blend Tank BLTTK-36	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- BLTTK- 35/36/37			
I E-DI V-BI 1"FK-36		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))		33/30/37			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-PLY- BLTTK- 35/36/37			
E-PLY-BLTTK-37	Blend Tank BLTTK-37	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-PLY- BLTTK- 38/39			
E-PLY-BLTTK-38	Blend Tank BLTTK-38	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A				
E-PLY-BLTTK-38		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-PLY- BLTTK- 38/39			
E-PLY-BLTTK-39	Blend Tank BLTTK-39	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
I H_PLY_RLTTK_30		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))		30/37			

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PLY-NBLT	North Blend Tank NBLT	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- N/SBLT			
E-PLY-NBLT		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition \$1.a.ii)					
E-PLY-SBLT	South Blend Tank SBLT	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PLY- N/SBLT			
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					
E-PLY- S/WTK-HL-65	Tank S/WTK-HL-65 (Tank TK-24)	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					

U-ZN Polymerization (PLY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
E-PLY-MUTK- 191	Tank MUTK-HL- 191A (Tank TK-202C)	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	F			
	(14111 111 2020)	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
E-PLY-S/WTK-	Tank S/WTK-HL- 191B (Tank TK-23/Redox Tank)	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	_			
HL-191B		7.25	Source-Wide Cumulative VOC PTE ≤ 5 TPY for non-VOC BACT Emission Points (See Specific Condition S1.a.iv.(2))		F			
E-PLY-MRSSTK	Monomer Recovery System (MRS) Solvent Tank (Top Fill)	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	F			
ETET MROSTI		7.12	Exempt from equipment standard because vapor pressure of VOC stored is < 1.5 psia					
E-PLY-STAR	STAR Program PLY Fugitive Emissions	5.21	Environmentally Acceptable	N/A	N/A			

U-ZN Pieco (PCO) Sub-Unit									
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)						
E-PCO-TK-4	East Coagulation & Wash Tank TK-4	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PCO-TK- 4/5/7/8/9				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))						

U-ZN Pieco (PCO) Sub-Unit									
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)						
E-PCO-TK-5	West Coagulation & Wash Tank TK-5	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PCO-TK- 4/5/7/8/9				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))						

U-ZN Pieco (PCO) Sub-Unit									
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)						
E-PCO-TK-7	East Settling Tank TK-7	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PCO-TK- 4/5/7/8/9				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition \$1.a.iv.(2))						

U-ZN Pieco (PCO) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-PCO-TK- 4/5/7/8/9			
E-PCO-TK-8	West Settling Tank TK-8	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A				
	Tunk Tix-0	40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))		TI JI II OI J			

U-ZN Pieco (PCO) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
E-PCO-TK-9	Feed Tank TK-9	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-PCO-TK- 4/5/7/8/9			
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Pieco (PCO) Sub-Unit									
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
E-PCO-TK-11	Feed Tank TK-11		See applicable regulation(s) and standards for E-PCO-CN-1 (Included with E-PCO-CN-1)		Included with E-PCO-CN-1				
		5.21	Environmentally Acceptable						
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	C-PLY-MRS					
E-PCO-CN-1	Process Condenser CN-1	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	(Monomer Recovery System) and MRS Vent Control System <sup>1</sup>	S-PLY- MRV-TO or S-PLY-TCO				
$H = P(C) = C \cdot N = 1$		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))						

U-ZN Spray Drying (SDR) Sub-Unit									
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	N/A	S-SDR-1BLT				
E-SDR-1BLT	No. 1 Blend Tank 1BLT	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)						
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))						

U-ZN Spray Drying (SDR) Sub-Unit									
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)						
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)						
E-SDR-2BLT	No. 2 Blend Tank 2BLT  40 CFR Part 63 Subpart U (When processing NBR)  40 CFR Part 63 Subpart JJJ (When processing SAN)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	S-SDR- E/W/2BLT					
		Subpart JJJ (When processing	Group 2 batch process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions						

U-ZN Spray Drying (SDR) Sub-Unit									
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-SDR- E/W/2BLT				
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A					
E-SDR-EBLT	East Blend Tank EBLT	40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))						
		40 CFR Part 63 Subpart JJJ (When processing SAN)	Group 2 batch process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions						

U-ZN Spray Drying (SDR) Sub-Unit									
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)						
	West Blend Tank WBLT  40 CF Sul (When N  40 CF Sub (When	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition <u>\$1.a.iii</u> )						
E-SDR-WBLT		40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	S-SDR E/W/2BLT				
		40 CFR Part 63 Subpart JJJ (When processing SAN)	Group 2 batch process vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions						

U-ZN Spray Drying (SDR) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.09	Less than 20% Opacity					
		6.09	Table 1 to Regulation 6.09		S-SDR-1SD			
E-SDR-1SD	No.1 Spray Dryer	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)	C-SDR-1SD (Fabric Filter)				
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition \$1.a.iii)					
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					
E-SDR-1SDHPR-1	No.1 Spray Dryer Product Hopper	6.09	Less than 20% Opacity	C-SDR-1SD	S-SDR-1SD			
	Product Hopper HPR-1	6.09	2.58 lbs/hr (Table 1 to Regulation 6.09) (Permit 67-10-C)	(Fabric Filter)				

U-ZN Spray Drying (SDR) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
E CDD 1CDCCD 5	No. 1 Spray Dryer	7.08	Less than 20% Opacity when optionally recycling material <sup>2</sup>	N/A <sup>2</sup> or	N/A <sup>2</sup> or Included with			
E-SDR-1SDSCR-5 Screener SCR-5	Screener SCR-5	7.08	2.34 lbs/hr when optionally recycling material <sup>2</sup> (Table 1 to Regulation 7.08) (Permit 67-10-C); otherwise a closed system	Included with E-SDR- 1SDHPR-1 <sup>2</sup>	E-SDR- 1SDHPR-1 <sup>2</sup>			
E-SDR-1SDHPR-4	No.1 Spray Dryer Packaging Hopper	7.08	Less than 20% Opacity	Included with E-SDR- 1SDHPR-1	Included with E-SDR- 1SDHPR-1			
	HPR-4	7.08	2.34 lbs/hr (Table 1 to Regulation 7.08) (Permit 67-10-C)					
E-SDR-1SDPKG	No. 1 Spray Dryer Packaging Station	7.08	Less than 20% Opacity	Included with E-SDR- 1SDHPR-1	Included with E-SDR-			
		7.08	2.34 lbs/hr (Table 1 to Regulation 7.08) (Permit 67-10-C)		1SDHPR-1			

U-ZN Spray Drying (SDR) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
E-SDR-2SD  (Continued on following page)	No. 2 Spray Dryer	5.21 6.09 6.09 6.24 6.43 Section 20	Environmentally Acceptable (Permit 358-08-C)  Normal Operations (when latex is being fed to No. 2 Spray Dryer): Acrylonitrile: 2,173 lbs/calendar yr  Allowed Emergency Shutdown Events <sup>3</sup> Acrylonitrile: 2 lbs/calendar yr 1,3-Butadiene: 1 lb/ calendar yr Styrene: 3 lbs/calendar yr  Less than 20% Opacity  5.01 lbs/hr (Table 1 to Regulation 6.09) for E-SDR-2SD, including E-SDR-2SDCYC and E-SDR-2SDRP (Permit 358-08-C)  Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition \$1.a.ii)  Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition \$1.a.iii)	C-SDR-2SD (Fabric Filter) and C-SDR-2SDRTO (Regenerative Thermal Oxidizer) (Normal operations) 3	S-SDR- 2SDRTO (Normal operations) <sup>3</sup>			

U-ZN Spray Drying (SDR) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
E-SDR-2SD (Continued from previous page)  No. 2 Spray Dry	No. 2 Spray Dryer	40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	C-SDR-2SD (Fabric Filter) and C-SDR-2SDRTO	S-SDR- 2SDRTO (Normal			
		40 CFR Part 63 Subpart JJJ (When processing SAN)	Group 2 batch process vent with annual emissions of organic HAP greater than or equal to 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions (Group 2 based on cut-off flow rate less than the annual average batch vent flow rate)	(Regenerative Thermal Oxidizer) (Normal operations) <sup>3</sup>	operations) <sup>3</sup>			
E-SDR-2SDCYC	No. 2 Spray Dryer Process Cyclone Separator	See applicable regulation (Included with E-SDR-	on(s) and standards for E-SDR-2SD 2SD)	Included with E-SDR-2SD	Included with E-SDR-2SD			
E-SDR-2SDHPR-1	No. 2 Spray Dryer Packaging Feed	7.08	Less than 20% Opacity	N/A	S-SDR-			
L-SDK-2SDIII K-1	Hopper HPR-1	7.08	1.0 lb/hr (APCD-approved limit for NSR avoidance)	1,771	2SDHPR-1			
E-SDR-2SDRP	No. 2 Spray Dryer Regular Packaging Station		on(s) and standards for E-SDR-2SD (Included with E-SDR-2SD)	Included with E-SDR-2SD	Included with E-SDR-2SD			

U-ZN Spray Drying (SDR) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
E-SDR-2SDSEP-1  No. 2 Spray Dryer Bulk Packaging Process Separator SEP-1	7.08	Less than 20% Opacity		g gp.p				
	Process Separator	7.08	2.3 lbs/hr total for E-SDR-2SDSEP-1, including E-SDR-2SDBPE and E-SDR-2SDBPW (APCD-approved limit for NSR avoidance)	N/A	S-SDR 2SDSEP-1			
E-SDR-2SDBPE	No. 2 Spray Dryer Bulk Packaging Station (East)	See Applicable Regulation(s) and Standards for E-SDR-2SDSEP-1 (Included with E-SDR-2SDSEP-1)		N/A	S-SDR- 2SDSEP-1			
E-SDR-2SDBPW	No. 2 Spray Dryer Bulk Packaging Station (West)		See Applicable Regulation(s) and Standards for E-SDR-2SDSEP-1 (Included with E-SDR-2SDSEP-1)		S-SDR- 2SDSEP-1			

	U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
E-DRY-CAGTK-	Tank CAGTK-106	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	F				
106	(Submerged Fill)	7.12	Submerged fill (See Specific Condition S1.a.i)	1 1 1 1					
E-DRY-CAGTK- 103		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)						
	7.25		Source-Wide Cumulative VOC PTE ≤ 5 TPY for non-VOC BACT Emission Points (See Specific Condition S1.a.iv.(2))	N/A	F				

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
E-DRY-TK-202	Tank TK-202 (Formerly Tank FTK-202) (What is a second control of the control of t	40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	F			
		40 CFR Part 63 Subpart FFFF (When processing ACM)	Group 2 Storage Tank (Capacity)  (Capacity less than 10,000 gallons, and therefore Group 2 Storage Tank by definition of Group 1 Storage Tank)					

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
E-DRY-TK-203	Coagulation Feed Tank TK-203 (Formerly Tank FTK-203)	40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	F			
		40 CFR Part 63 Subpart FFFF (When processing ACM)	Group 2 Storage Tank (Capacity)  (Capacity less than 10,000 gallons, and therefore Group 2 Storage Tank by definition of Group 1 Storage Tank)					

	U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)						
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	F				
E-DRY-TK-204	Coagulation Feed Tank TK-204 (Formerly Tank FTK-204)	40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))						
	40 CFR Part 63 Subpart FFFF (When processing ACM)	Subpart FFFF (When processing	Group 2 Storage Tank (Capacity)  (Capacity less than 10,000 gallons, and therefore Group 2 Storage Tank by definition of Group 1 Storage Tank)						

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition \$1.a.ii)					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
	Coagulation Tank TK-15H	TK-15H  40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	S-DRY-NC/W			
		40 CFR Part 63 Subpart FFFF (When processing ACM)	Exempt by Definition of Batch Process Vent  (Undiluted and uncontrolled containing less than 50 ppmv HAP; not part of any batch process vent)					

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-DRY-NC/W			
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition \$1.a.iii)	N/A				
E-DRY-NSCR-1 Scre	Screen SCR-1	Screen SCR-1  40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					
	_	40 CFR Part 63 Subpart FFFF (When processing ACM)	Exempt by Definition of Batch Process Vent  (Undiluted and uncontrolled containing less than 50 ppmv HAP; not part of any batch process vent)					

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
I E DEV NIK 16H I T		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
	Serum Tank TK-16H	40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	S-DRY-NC/W			
		40 CFR Part 63 Subpart FFFF (When processing ACM)	Exempt by Definition of Batch Process Vent  (Undiluted and uncontrolled containing less than 50 ppmv HAP; not part of any batch process vent)					

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
	6.24  6.43 Section 20  Leach Tank TK-17H  40 CFR Part 63 Subpart U (When processing NBR)  40 CFR Part 63 Subpart FFFF (When processing ACM)	6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
		Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	S-DRY-NC/W				
		Subpart FFFF (When processing	Exempt by Definition of Batch Process Vent  (Undiluted and uncontrolled containing less than 50 ppmv HAP; not part of any batch process vent)					

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition \$1.a.iii)					
E-DRY-NSCR-2	Screen SCR-2	40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	S-DRY-NC/W			
	Subp (When	40 CFR Part 63 Subpart FFFF (When processing ACM)	Exempt by Definition of Batch Process Vent  (Undiluted and uncontrolled containing less than 50 ppmv HAP; not part of any batch process vent)					

U-ZN Drying (DRY) Sub-Unit									
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
I E DDA MUK ISH I		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)						
	Wash Water Tank TK-18H	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)						
		40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	S-DRY-NC/W				
		40 CFR Part 63 Subpart FFFF (When processing ACM)	Exempt by Definition of Batch Process Vent  (Undiluted and uncontrolled containing less than 50 ppmv HAP; not part of any batch process vent)						

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition \$1.a.iii)					
E-DRY-NPRS-1	De-Watering Machine PRS-1	40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	S-DRY- NPRS/NDR1			
		40 CFR Part 63 Subpart FFFF (When processing ACM)	Exempt by Definition of Batch Process Vent  (Undiluted and uncontrolled containing less than 50 ppmv HAP; not part of any batch process vent)					

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
E-DRY-NGR-1H		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)					
	Wet Grinder GR-1H  40 CFR Par Subpart (When proce NBR)  40 CFR Par Subpart FI (When proce	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
		40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	S-DRY- NPRS/NDR1			
		40 CFR Part 63 Subpart FFFF (When processing ACM)	Exempt by Definition of Batch Process Vent  (Undiluted and uncontrolled containing less than 50 ppmv HAP; not part of any batch process vent)					

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.24	Minimum overall plant-wide 85% VOC emissions reduction averaged over a calendar month for all Regulation 6.24 Emission Points. (See Specific Condition S1.a.ii)		S-DRY- NPRS/NDR1, S-DRY-NDR2, and S-DRY-NDR3			
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A				
		7.08	Less than 20% Opacity					
		7.08	Table 1 to Regulation 7.08					
E-DRY-NDR	Dryer	40 CFR Part 63 Subpart U (When processing NBR)	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition \$\frac{\mathbf{S}1.a.iv.(2)}{\mathbf{S}}\)					
		40 CFR Part 63 Subpart FFFF (When processing ACM)	Exempt by Definition of Batch Process Vent  (Undiluted and uncontrolled containing less than 50 ppmv HAP; not part of any batch process vent)					

		U-ZN I	Orying (DRY) Sub-Unit		
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference
E-DRY-NCC	Crumb Cooler	7.08 7.08	Less than 20% Opacity  Table 1 to Regulation 7.08	C-DRY- NSED-2 (Fabric Filter)	S-DRY-NSED-2
E-DRY-NFE-2	Dusting Agent Process Filter	7.08 7.08	Less than 20% Opacity  Table 1 to Regulation 7.08	N/A	S-DRY-NFE-2
E-DRY-NCP	Crumb Packaging	See applicable regulation(s) and standards for E-DRY-NCC (Included with E-DRY-NCC)		C-DRY- NSED-2 (Fabric Filter)	S-DRY-NSED-2
E-DRY-PSTK-301	Coagulation Tank TK-301	5.21 6.43 Section 20 7.25 40 CFR Part 63 Subpart U	Environmentally Acceptable  Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)  VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))  Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))	N/A	S-DRY- PSBL-300

	U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-DRY- PSBL-300				
E-DRY-PSSCR- 301A	Screen SCR-301A	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))						
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))		1000				

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
E-DRY-PSTK-306		7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))	N/A	S-DRY-PSBL-300			
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-DRY-PSBL-300			
E-DRY-PSTK-302	Hold-Up (Wash) Tank TK-302	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))					
	Tunk TK 302	40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-DRY-PSBL-300			
E-DRY-PSSCR- 302 A	Screen SCR-302A	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))					
E-DRY-PSSCR- 302A		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	S-DRY-PSBL-300			
E-DRY-PSTK- 303A	Extraction Tank TK-303A	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))					
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

	U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
	5.21	Environmentally Acceptable							
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)						
E-DRY-PSSCR- 302B	Screen SCR-302B	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))	N/A	S-DRY-PSBL-300				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))						

	U-ZN Drying (DRY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
	5.21	Environmentally Acceptable						
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
E-DRY-PSTK-303B	Washing Tank TK-303B	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))	N/A	S-DRY-PSBL-300			
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))					

	U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
	5.21	Environmentally Acceptable							
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)						
E-DRY-PSSCR-303	Screen SCR-303	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))	N/A	S-DRY-PSBL-300				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition \$1.a.iv.(2))						

	U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
	5.21	Environmentally Acceptable							
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)						
E-DRY-PSTK-304	Recycle Water Tank TK-304	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))	N/A	S-DRY-PSBL-300				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition \$1.a.iv.(2))						

	U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)						
E-DRY-PSSCR-304 S	Screen SCR-304	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))	N/A	S-DRY-PSBL-300				
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition \$\frac{\mathbf{S}1.a.iv.(2)}{\mathbf{L}}\)						

	U-ZN Drying (DRY) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
		5.21	Environmentally Acceptable					
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)					
	De-Watering Machine PRS-300	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))	N/A	S-DRY-PSBL-300			
		40 CFR Part 63 Subpart U	Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition \$\frac{\text{S1.a.iv.(2)}}{\text{S1.a.iv.(2)}}					

	U-ZN Drying (DRY) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		5.21	Environmentally Acceptable						
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)						
		7.08	Less than 20% Opacity	N/A	S-DRY-PSBL-302 <sup>4</sup> (Dryer Inlet/"Hot Stack") and S-DRY-PSBL-301 <sup>4</sup> (Dryer Outlet/"Cool Stack")				
		7.08	Table 1 to Regulation 7.08						
E-DRY-PSDR	Dryer	7.25	VOC BACT (July 29, 1991 VOC BACT Analysis by ERM-Midwest, Inc.) (See Specific Condition S1.a.iv.(4))						
	40 CFR Part 63 Subpart U		Back-end process operation subject to organic HAP emission limitation from all back-end process operations of 0.000315 Mg organic HAP emissions per Mg NBR produced. (0.630 lb organic HAP emissions per ton NBR produced) (See Appendix A Specific Condition S1.a.iv.(2))						

	U-ZN Pelletizing (PEL) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
	Crumb Conveying	7.08	Less than 20% Opacity					
E-PEL-SEP-1		7.08	1.0 lb/hr (APCD-approved limit for NSR avoidance) (Permit 33-98-C)	N/A	S-PEL-SEP-1			
				6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition <u>\$1.a.iii</u> )			
E-PEL-PEL-1	Pelletizer PEL-1	7.25	VOC BACT (April 9, 1998 VOC BACT Analysis by Kentuckiana Engineering Company, Inc.) (See Specific Condition S1.a.iv.(5))	N/A	F			
	Pelletizer Water	6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)	N/A	F			
E-PEL-TK-2	Recirculation Tank TK-2	7.25	VOC BACT (April 9, 1998 VOC BACT Analysis by Kentuckiana Engineering Company, Inc.) (See Specific Condition S1.a.iv.(5))					

U-ZN Pelletizing (PEL) Sub-Unit							
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference		
		6.43 Section 20	Daily plant-wide VOC emissions cap of 4,133 lbs (See Specific Condition S1.a.iii)				
		7.08	Less than 20% Opacity				
E-PEL-SEP-2	Process Pellet Separator/Dryer SEP-2	7.08	1.0 lb/hr (APCD-approved limit for NSR avoidance) (Permit 33-98-C)	N/A	S-PEL-SEP-2		
		7.25	VOC BACT (April 9, 1998 VOC BACT Analysis by Kentuckiana Engineering Company, Inc.) (See Specific Condition S1.a.iv.(5))				
		7.08	Less than 20% Opacity				
E-PEL-CV-2 Dryer/Co	Dryer/Cooler CV-2	Dryer/Cooler CV-2 7.08	1.4 lbs/hr total for E-PEL-CV-2, and either E-PEL-SEP-3 or E-PEL-SEP-4 (APCD-approved limit for NSR avoidance) (Permit 33-98-C and Permit 34-98-C)	C-PEL-FIL-3 (Fabric Filter)	S-PEL-FIL-3		
		7.08	Less than 20% Opacity				
E-PEL-SEP-3	Semi-Bulk Packaging Process Cyclone SEP-3	7.08	1.4 lbs/hr total for E-PEL-CV-2, and either E-PEL-SEP-3 or E-PEL-SEP-4 (APCD-approved limit for NSR avoidance) (Permit 33-98-C and Permit 34-98-C)	C-PEL-FIL-3 (Fabric Filter)	S-PEL-FIL-3		

	U-ZN Pelletizing (PEL) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
		7.08	Less than 20% Opacity						
E-PEL-SEP-4	Box Packaging Process Cyclone SEP-4	7.08	1.4 lbs/hr total for E-PEL-CV-2, and either E-PEL-SEP-3 or E-PEL-SEP-4 (APCD-approved limit for NSR avoidance) (Permit 33-98-C and Permit 34-98-C)	C-PEL-FIL-3 (Fabric Filter)	S-PEL-FIL-3				

	U-ZN Miscellaneous (MSC) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference				
E-MSC-LDAR	Leak Detection and Repair (LDAR) Components	40 CFR Part 63 Subparts U, JJJ, and FFFF	LDAR MACT Requirements (40 CFR Part 63 Subpart H LDAR provisions as referenced by the individual MACT Standard) (See Appendix F Standards, Monitoring and Record Keeping, and Reporting requirements)	N/A	N/A				
E-MSC-PRTWSH	Maintenance Parts Washers (Maintenance Cold Cleaners)	6.18	Equipment, Operating and Material Requirements	N/A	F (In Use with Lid Open)				

U-ZN Miscellaneous (MSC) Sub-Unit								
Identification	Description	Applicable Regulation(s)	Standard	Control Reference (Description)	Stack Reference			
Emergency Diesel	5.21	Environmentally Acceptable						
	Generator (With Associated Insignificant Activity Internal 785-gal Diesel Fuel Tank, see this permit's Insignificant Activity list)	7.08	Less than 20% Opacity					
E-MSC- EMGEN001		7.08	Table 1 to Regulation 7.08	N/A	S-MSC- EMGEN001			
EMGEN001		40 CFR Part 63 Subpart ZZZZ	Except for Initial Notification Requirements of 40 CFR 63.6645(f), Exempt from 40 CFR Part 63 Subpart ZZZZ MACT Standard Provisions by 40 CFR 63.6590(b)(1) ("New" Emergency Stationary RICE)					

## U-ZN Emission Point Table Notes:

- 1. The MRS (Monomer Recovery System) Vent Control System consists of two Buffer Tanks (TO-BTTK-1 and TO-BTTK-2) and a Control Device (either C-PLY-MRV-TO (Thermal Oxidizer) or C-PLY-TCO (Thermal Catalytic Oxidizer)).
- 2. E-SDR-1SDSCR-5 is a closed system during normal operation; included with E-SDR-1SDHPR-1 when optionally recycling material
- 3. During allowed emergency shutdown events, C-SDR-2SDRTO (Regenerative Thermal Oxidizer) shuts down, latex feed to No. 2 Spray Dryer immediately shuts down; Control ID is C-SDR-2SD (Fabric Filter); and Stack ID is S-SDR-2SD.
- 4. Emission Point E-DRY-PSDR has two stacks Stack S-DRY-PSBL-302 at the dryer feed, or inlet, end (also known to Zeon as the "hot stack"), and Stack S-DRY-PSBL-301 at the dryer outlet end (also known to Zeon as the "cool stack"). All associated regulated emissions from Emission Point E-DRY-PSDR are expected to be vented to the atmosphere through Stack S-DRY-PSBL-302 ("hot stack"); there are no regulated emissions expected from Stack S-DRY-PSBL-301 ("cool stack").
- 5. Former Title V Emission Points E-DRY-FTK-205, E-DRY-FDW, E-DRY-FCR, and E-DRY-FDR have been removed from the Zeon Plant Site and the VOC Emissions credits from the removal (3.5 tons) were banked under APCD Banking Permit 36096-12-B.
- 6. NSPS 40 CFR 60 Subpart Kb, which was cited in Zeon's earlier Title V Operating Permits as applicable to Emission Points E-TKF-TK-109, E-TKF-TK-403, and E-TKF-TK-412, was subsequently amended by U.S. EPA to apply to volatile organic liquid (VOL) storage vessels with a capacity greater than or equal to 75 m³ (19,815 gals) for which construction, reconstruction or modification commenced after July 23,1984. The capacity of each of Zeon's VOL storage vessels installed after July 23, 1984 is less than this required capacity.

U-ZN Control Devices					
Identification	Description	Pollutant(s) Controlled	Performance Indicator	Parameter Range	Stack Reference
C-TKF-100CFU	Carbon Adsorber (Drums containing carbon used in series)	N/A	N/A	N/A	S-TKF-100CFU
C-PLY-MRS (1 of 2) <sup>1</sup>	Monomer Recovery System (MRS)	VOC, HAP, and TAC	Average monthly post- stripping residual monomer levels [acrylonitrile (AN) and 1,3- butadiene (BD)]	Regulation 6.24 Parametric  Monitoring: Average monthly post- stripping residual monomer levels shall not exceed: 1. 6,870 ppm acrylonitrile 2. 810 ppm butadiene  STAR Parametric Monitoring: Average monthly post- stripping latex residual monomer levels shall not exceed:  1. NBR Bale Rubber: 100 ppm acrylonitrile 10 ppm butadiene 2. NBR Powder Rubber: 100 ppm acrylonitrile 25 ppm butadiene 3. NBR Liquid Rubber: 250 ppm acrylonitrile 25 ppm butadiene	N/A - Vented to Monomer Recovery System (MRS) Vent Control System

#### **U-ZN Control Devices** Pollutant(s) Description Parameter Range Identification Performance Indicator Stack Reference Controlled Thermal Oxidizer (1 of 2 Control Devices in Minimum combustion C-PLY-MRV-TO S-PLY-MRVthe Monomer Recovery Combustion temperature temperature of $(2a \text{ of } 2)^1$ TO System (MRS) Vent 1250 °F Control System) VOC, HAP, or or or or or and TAC Thermal Catalytic C-PLY-TCO Oxidizer (When Used as Part (1 of 2 Control Devices in Minimum catalyst bed of MRS Vent Catalyst bed temperature S-PLY-TCO the Monomer Recovery temperature of 962 °F Control System) System (MRS) Vent $(2b \text{ of } 2)^1$ Control System) C-PLY-TCO (Normal Operation; Thermal Catalytic VOC, HAP, Minimum catalyst bed Not in Operation as Catalyst bed temperature S-PLY-TCO Oxidizer and TAC temperature of 450°F Part of MRS Vent Control System) Pressure drop measured by C-SDR-1SD Fabric Filter PM/PM<sub>10</sub>/PM<sub>2.5</sub> 1" - 25" w.c. S-SDR-1SD inches water column (w.c.)

U-ZN Control Devices					
Identification	Description	Pollutant(s) Controlled	Performance Indicator	Parameter Range	Stack Reference
C-SDR-2SD (1 of 2)	Fabric Filter	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	Pressure drop measured by inches water column (w.c.)	1" – 25" w.c.	Vented to C-SDR2SDRTO (During Normal Operation);  Vented through S-SDR-2SD (During Allowed Emergency Shutdown Events) <sup>2</sup>
C-SDR-2SDRTO (2 of 2) <sup>2</sup>	Regenerative Thermal Oxidizer (Control Device in the No. 2 Spray Dryer RTO Control System)	VOC, HAP, and TAC	Combustion temperature	Minimum 1500 °F	S-SDR- 2SDRTO
C-DRY-NSED-2	Fabric Filter	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	N/A	N/A	S-DRY-NSED-2
C-PEL-FIL-3	Fabric Filter	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	N/A	N/A	S-PEL-FIL-3

#### U-ZN Control Device Table Notes:

- 1. The MRS (Monomer Recovery System) Vent Control System consists of two Buffer Tanks (TO-BTTK-1 and TO-BTTK-2) and a Control Device (either C-PLY-MRV-TO (Thermal Oxidizer) or C-PLY-TCO (Thermal Catalytic Oxidizer)).
- 2. During allowed emergency shutdown events, C-SDR-2SDRTO (Regenerative Thermal Oxidizer) shuts down; latex feed to No. 2 Spray Dryer immediately shuts down; Control ID is C-SDR-2SD (Fabric Filter); and Stack ID is S-SDR-2SD.

# **Specific Conditions**

### S1. Standards (Regulation 2.16, Section 4.1.1)

a. **VOC** (Regulations 6.13, Section 3.3; 6.18, Section 4; 6.24, Sections 3.2 & 3.3; 6.43, Section 20; 7.12, Section 3.3; 7.25 Section 3)

i. For Emission Points E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, E-TKF-TK-109, E-TKF-TK-401, E-TKF-TK-402, E-TKF-TK-403, E-TKF-TK-404, E-TKF-TK-405, E-TKF-TK-406, E-TKF-TK-407, E-TKF-TK-408, E-TKF-TK-409, E-TKF-TK-410, E-TKF-TK-411, E-TKF-TK-412, E-PLY-TK-307N, E-PLY-TK-304, E-PLY-TK-305, E-PLY-TK-306, E-PLY-TK-150, E-PLY-TK-152, E-PLY-MRSSTK and E-DRY-CAGTK-106, the owner or operator shall comply with the following standard for volatile organic compounds for Emission Points subject to Regulations 6.13 and 7.12:

If the storage vessel has a storage capacity greater than 250 gallons, and if the true vapor pressure of the volatile organic compound, as stored, is equal to or greater than 1.5 psia, as a minimum it shall be equipped with a permanent submerged fill pipe. True vapor pressure "as stored" shall be determined on an instantaneous basis under conditions representing expected worst case conditions. (Regulations 6.13 and 7.12, Section 3.3)

- (1) Emission Points E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, E-TKF-TK-109, E-TKF-TK-401, E-TKF-TK-402, E-TKF-TK-404, E-TKF-TK-405, E-TKF-TK-406, E-TKF-TK-407, E-TKF-TK-409, E-TKF-TK-410, E-PLY-TK-307N, E-PLY-TK-304, E-PLY-TK-305, E-PLY-TK-306 and E-DRY-CAGTK-106, each of which has a capacity of greater than 250 gallons and less than or equal to 40,000 gallons, are each equipped with submerged/bottom fill, and may store any VOC regardless of vapor pressure.
- (2) Emission Points E-TKF-TK-403, E-TKF-TK-408, E-TKF-TK-411, E-TKF-TK-412, E-PLY-TK-150, E-PLY-TK-152 and E-PLY-MRSSTK, each of which has a capacity of greater than 250 gallons and less than or equal to 40,000 gallons, are each not equipped with submerged/bottom fill, and the vapor pressure of the volatile organic compound, as stored, shall be less than 1.5 psia.
- ii. For Emission Points cited in the U-ZN Emission Points Table as being subject to Regulation 6.24: The owner or operator shall achieve a minimum overall 85% VOC reduction averaged over a calendar month time period by not exceeding average monthly post-stripping residual monomer levels of 6,870 ppm acrylonitrile and 810 ppm butadiene. (See Comment 1 and Comment 2) (Regulation 6.24, Sections 3.2 & 3.3)
- iii. The owner or operator shall not exceed the plant-wide VOC emissions cap of 4,133 pounds per day. (Regulation 6.43, Section 20)

iv. For Emission Points E-PLY-PAMU, E-PLY-TK-14G, E-PLY-TK-15G, E-PLY-TK-16G, E-PLY-TK-103C, E-PLY-PLY-37, E-PLY-PLY-38, E-PLY-S/WTK-HL-191B, E-DRY-CAGTK-103, E-DRY-PSTK-301, E-DRY-PSSCR-301A, E-DRY-PSTK-306, E-DRY-PSTK-302, E-DRY-PSSCR-302A, E-DRY-PSTK-303A, E-DRY-PSSCR-302B, E-DRY-PSTK-303B, E-DRY-PSSCR-303, E-DRY-PSTK-304, E-DRY-PSSCR-304, E-DRY-PSPRS-300, E-DRY-PSDR, E-PEL-PEL-1, E-PEL-TK-2 and E-PEL-SEP-2, each of which is subject to Regulation 7.25:

- (1) For Emission Point E-PLY-PAMU, installed pre-December 16, 1987, the annual VOC emissions shall not exceed 0.359 TPY. (Regulation 7.25, Section 3.2) (See Comment 3 and Comment 4)
- (2) For non-VOC BACT Emission Points E-PLY-TK-14G, E-PLY-TK-15G, E-PLY-TK-16G, E-PLY-S/WTK-HL-191B and E-DRY-CAGTK-103, the source-wide cumulative VOC emissions shall be less than or equal to 5 TPY. (See Comment 3)
- (3) For Emission Points E-PLY-TK-103C, E-PLY-PLY-37 and E-PLY-PLY-38:
  - (a) The owner or operator shall utilize Control Device C-PLY-TCO whenever E-PLY-PLY-37 or E-PLY-PLY-38 is in operation and venting of emissions occurs. (See Comment 3 and Comment 7) (Permit 34909-12-C)
  - (b) When controlling emissions from Emission Point E-PLY-PLY-37 or E-PLY-PLY-38, Control Device C-PLY-TCO shall operate with the catalyst bed at a minimum temperature of 450°F. (See Comment 7) (Permit 34909-12-C)
- (4) For Emission Points E-DRY-PSTK-301, E-DRY-PSSCR-301A, E-DRY-PSTK-306, E-DRY-PSTK-302, E-DRY-PSSCR-302A, E-DRY-PSTK-303A, E-DRY-PSSCR-302B, E-DRY-PSTK-303B, E-DRY-PSSCR-303, E-DRY-PSTK-304, E-DRY-PSSCR-304, E-DRY-PSPRS-300 and E-DRY-PSDR, the combined annual VOC emissions shall not exceed 30.256 TPY. (Regulation 7.25, Section 3.1) (See Comment 5)
- (5) For Emission Points E-PEL-PEL-1, E-PEL-TK-2 and E-PEL-SEP-2, the combined VOC emissions shall not exceed 5 TPY. (Regulation 7.25, Section 3.1) (See Comment 6)
- v. For Emission Point E-MSC-PRTWSH subject to Regulation 6.18:
  - (1) The owner or operator shall install, maintain, and operate the control equipment as follows: (Regulation 6.18, Section 4.1)
    - (a) The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. (Regulation 6.18, Section 4.1.1)

(b) The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. (Regulation 6.18, Section 4.1.2)

- (c) A permanent, conspicuous label summarizing the operating requirements specified in Specific Condition S1.a.v.(2) shall be installed on or near the cold cleaner. (Regulation 6.18, Section 4.1.3)
- (d) If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. (Regulation 6.18, Section 4.1.4)
- (e) Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. (Regulation 6.18, Section 4.1.6)
- (f) The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks. (Regulation 6.18, Section 4.1.8)
- (2) The owner or operator shall observe at all times the following operating requirements: (Regulation 6.18, Section 4.2)
  - (a) Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. (Regulation 6.18, Section 4.2.1)
  - (b) The solvent level in the cold cleaner shall not exceed the fill line. (Regulation 6.18, Section 4.2.2)
  - (c) The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. (Regulation 6.18, Section 4.2.3)
  - (d) Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. (Regulation 6.18, Section 4.2.4)

(e) Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. (Regulation 6.18, Section 4.2.5)

- (f) A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. (Regulation 6.18, Section 4.2.6)
- (g) Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. (Regulation 6.18, Section 4.2.7)
- (3) The owner or operator shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mmHg (0.019 psi) measured at 20°C (68°F). (Regulation 6.18, Section 4.3.2)
- b. **PM** (Regulations 6.09, Section 3.2; and 7.08, Section 3.1.2)

For Emission Points E-SDR-1SD, E-SDR-1SDHPR-1, E-SDR-1SDSCR-5, E-SDR-1SDHPR-4, E-SDR-1SDPKG, E-SDR-2SD, E-SDR-2SDCYC, E-SDR-2SDHPR-1, E-SDR-2SDRP, E-SDR-2SDSEP-1, E-SDR-2SDBPE, E-SDR-2SDBPW, E-DRY-NDR, E-DRY-NCC, E-DRY-NFE-2, E-DRY-NCP, E-DRY-PSDR, E-PEL-SEP-1, E-PEL-SEP-2, E-PEL-CV-2, E-PEL-SEP-3, E-PEL-SEP-4, and E-MSC-EMGEN001, each of which when operating is individually subject to Regulation 6.09 or 7.08:

- i. The owner or operator shall not cause, suffer, allow, or permit the emissions into the open air of particulate matter from any affected facility that is in excess of the quantity specified in Table 1 of Regulations 6.09 or 7.08 as the regulatory allowable. For Emission Points E-SDR-1SD, E-SDR-1SDHPR-1, E-SDR-1SDSCR-5 (when optionally recycling material), E-SDR-1SDHPR-4, E-SDR-1SDPKG, E-SDR-2SD (including E-SDR-2SDCYC and E-SDR-2SDRP), E-DRY-NDR, E-DRY-NCC (including E-DRY-NCP), E-DRY-NFE-2, E-DRY-PSDR and E-MSC-EMGEN001, when each is in operation, the Table 1 value is the applicable particulate matter (PM) emission limit. (Regulations 6.09, Section 3.2; and 7.08, Section 3.1.2) (Permit 183-07-C, Permit 358-08-C and Permit 67-10-C) (See Comment 12)
- ii. For Emission Point E-SDR-2SDHPR-1, when in operation, the particulate matter (PM) emission limit is 1.0 lb/hr. (See Comment 9) (Regulation 7.08, Section 3)
- iii. For Emission Points E-SDR-2SDSEP-1, including E-SDR-2SDBPE and E-SDR-2SDBPW, when any of these emission points is in operation, the

total combined particulate matter (PM) emission limit is 2.3 lb/hr. (Regulation 7.08, Section 3) (Permit 110-98-C)

- iv. For Emission Points E-PEL-SEP-1 and E-PEL-SEP-2, when each is in operation, the particulate matter (PM) emission limit for each individual Emission Point is 1.0 lb/hr. (Regulation 7.08, Section 3) (Permit 33-98-C)
- v. For Emission Points E-PEL-CV-2, E-PEL-SEP-3 and E-PEL-SEP-4, when any of these Emission Points is in operation, the particulate matter (PM) emission limit is 1.4 lb/hr total for E-PEL-CV-2 and either E-PEL-SEP-3 or E-PEL-SEP-4. (Regulation 7.08, Section 3) (Permit 33-98-C) (Permit 34-98-C)
- vi. Emission Point E-SDR-1SDSCR-5, when not optionally recycling material, is a closed system, and there is no particulate matter (PM) emission limit. (Permit 67-10-C)
- c. **Opacity** (Regulations 6.09, Section 3.1; and 7.08, Section 3.1.1)

For Emission Points E-SDR-1SD, E-SDR-1SDHPR-1, E-SDR-1SDSCR-5 (when optionally recycling material), E-SDR-1SDHPR-4, E-SDR-1SDPKG, E-SDR-2SD, E-SDR-2SDCYC, E-SDR-2SDHPR-1, E-SDR-2SDRP, E-SDR-2SDSEP-1, E-SDR-2SDBPE, E-SDR-2SDBPW, E-DRY-NDR, E-DRY-NCC, E-DRY-NFE-2, E-DRY-NCP, E-DRY-PSDR, E-PEL-SEP-1, E-PEL-SEP-2, E-PEL-CV-2, E-PEL-SEP-3, E-PEL-SEP-4, and E-MSC-EMGEN001:

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility, or from any air pollution control equipment installed on any affected facility, any gases that may contain particulate matter that is equal to or greater than 20% opacity. (Regulations 6.09, Section 3.1; and 7.08, Section 3.1.1)

#### d. TAC

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulation 5.00, 5.01, and 5.21)
- ii. For the Monomer Recovery System (MRS) Vent Control System's Control Device C-PLY-MRV-TO, when operating and controlling the vent stream from the Monomer Recovery System (C-PLY-MRS): (Regulation 5.00, 5.01, and 5.21)
  - (1) The Monomer Recovery System vent stream shall not be discharged uncontrolled to the atmosphere. At all times the Monomer Recovery System (C-PLY-MRS) is operating, the vent stream shall be controlled by the Thermal Oxidizer (C-PLY-MRV-TO) or the Thermal Catalytic Oxidizer (C-PLY-TCO), or held in the Buffer Tank(s) (TO-BTTK-1 and TO-BTTK-2).
  - (2) The owner or operator shall operate the Thermal Oxidizer to have a minimum of 0.50 second residence time.
  - (3) The Thermal Oxidizer shall have a minimum destruction efficiency of 99.9%.

(4) During normal operation, the Thermal Oxidizer shall be operated at a minimum combustion temperature of 1250°F.

- iii. For the MRS Vent Control System's Control Device C-PLY-TCO, when operating and controlling the vent stream from the Monomer Recovery System (C-PLY-MRS): (Regulation 5.00, 5.01, and 5.21)
  - (1) The MRS vent stream shall not be discharged uncontrolled to the atmosphere. At all times the Monomer Recovery System (C-PLY-MRS) is operating, the vent stream shall be controlled by the Thermal Catalytic Oxidizer (C-PLY-TCO) or the Thermal Oxidizer (C-PLY-MRV-TO), or held in the Buffer Tank(s) (TO-BTTK-1 and TO-BTTK-2).
  - (2) The Thermal Catalytic Oxidizer (C-PLY-TCO) shall be operated with a maximum airflow of 3,500 scfm from the fan (air blower).
  - (3) When used as part of the MRS Vent Control System, the Thermal Catalytic Oxidizer shall have a minimum destruction efficiency of 99.5%.
  - (4) When used as part of the MRS Vent Control System, during normal operation, the Thermal Catalytic Oxidizer shall be operated at a minimum catalyst bed temperature of 962°F.
- iv. For Control Device C-SDR-2SDRTO, controlling Emission Points E-SDR-2SD and E-SDR-2SDCYC, when E-SDR-2SD is operating and latex is being fed to No. 2 Spray Dryer: (Regulation 5.00, 5.01, and 5.21)
  - (1) Except for allowed emergency shutdown events, at all times Emission Point E-SDR-2SD is operating and latex is being fed to No. 2 Spray Dryer, emissions from the No. 2 Spray Dryer vent stream (E-SDR-2SD) shall be controlled for TACs by Control Device C-SDR-2SDRTO.
  - (2) Except for allowed emergency shutdown events, when latex is being fed to No. 2 Spray Dryer, the owner or operator shall not discharge to the atmosphere from No. 2 Spray Dryer Regenerative Thermal Oxidizer (C-SDR-2SDRTO) acrylonitrile emissions in excess of 2,173 pounds per calendar year.
  - (3) The owner or operator shall operate the No. 2 Spray Dryer Regenerative Thermal Oxidizer (C-SDR-2SDRTO) to have a minimum of 0.50 second residence time.
  - (4) The No. 2 Spray Dryer Regenerative Thermal Oxidizer (C-SDR-2SDRTO) shall have a minimum destruction efficiency of 85% for the acrylonitrile.
  - (5) During normal operation, when latex is being fed to No. 2 Spray Dryer, Control Device C-SDR-2SDRTO shall be operated at a minimum combustion temperature of 1500°F.
  - (6) The No. 2 Spray Dryer vent stream shall be allowed to be discharged to the atmosphere uncontrolled for TACs during emergency shutdown events. The individual uncontrolled TAC

emissions discharged during such emergency shutdown events shall not exceed the following allowable calendar year emission limits listed in \$1.d.iv.(6)(a) through \$1.d.iv.(6)(c).

Uncontrolled TAC emissions discharged during emergency shutdown events from Emission Points E-SDR-2SD and E-SDR-2SDCYC shall not exceed the following allowable calendar year emission limits.

- (a) 2 lbs/calendar year acrylonitrile,
- (b) 1 lb/calendar year 1,3-butadiene, and
- (c) 3 lbs/calendar year styrene
- (7) When latex is not being fed to No. 2 Spray Dryer or the volume of air in the No. 2 Spray Dryer System is not associated with an emergency shutdown event, the No. 2 Spray Dryer Regenerative Thermal Oxidizer (C-SDR-2SDRTO) may be by-passed.
- v. For new individual STAR Process PLY38 (Emission Point E-PLY-PLY-38), the owner or operator shall utilize Control Device C-PLY-TCO when E-PLY-PLY-38 is operating and processing recipe grades with uncontrolled TAC emissions above the individual TAC de minimis levels. (Regulation 5.00, 5.01, and 5.21) (See Comment 16)
- vi. The owner or operator shall achieve plant-wide Environmental Acceptability Goals by not exceeding average monthly post-stripping latex residual monomer levels for TACs listed in the table below:

TAC	Product Type Maximum Average Monthly Post-Stripping Latex Residual Monomer Level			
TAC	NBR Bale Rubber	NBR Powder Rubber	NBR Liquid Rubber	
Acrylonitrile	100 ppm	100 ppm	250 ppm	
Butadiene	10 ppm	25 ppm	25 ppm	

### e. NO<sub>x</sub> (Regulation 7.08, Section 3.1.1)

See Comment 18 and Comment 19.

#### f. Unit Operation

For Emission Point E-MSC-EMGEN001:

i. The owner or operator shall not allow or cause the emission of air pollutants which exceed the requirements of the District regulations or which cause injury, detriment, nuisance, or annoyance to any considerable

number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. (Regulation 1.09)

ii. The owner or operator shall limit the operation of this unit to five hundred (500) hours in any 12 consecutive month period. (Regulation 2.03, Section 5.1) (See Comment 17, Comment 18, and Comment 19)

## g. District Regulation 5.15 Regulated Substance (40 CFR Part 68 Subpart G)

The owner or operator shall comply with the Risk Management Plan for the handling of acrylonitrile; ammonia (anhydrous); and 1,3-butadiene, submitted to EPA on June 8, 2009.

#### S2. Monitoring and Record Keeping (Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

#### a. **VOC**

- For Emission Points E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, E-TKF-TK-109, E-TKF-TK-401, E-TKF-TK-402, E-TKF-TK-403, E-TKF-TK-404, E-TKF-TK-405, E-TKF-TK-406, E-TKF-TK-407, E-TKF-TK-408, E-TKF-TK-409, E-TKF-TK-410, E-TKF-TK-411, E-TKF-TK-412, E-PLY-TK-307N, E-PLY-TK-304, E-PLY-TK-305, E-PLY-TK-306, E-PLY-TK-150, E-PLY-TK-152, E-PLY-MRSSTK and E-DRY-CAGTK-106 subject to Regulations 6.13 or 7.12:
  - (1) For Emission Points E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, E-TKF-TK-109, E-TKF-TK-401, E-TKF-TK-402, E-TKF-TK-404, E-TKF-TK-405, E-TKF-TK-406, E-TKF-TK-407, E-TKF-TK-409, E-TKF-TK-410, E-PLY-TK-307N, E-PLY-TK-304, E-PLY-TK-305, E-PLY-TK-306 and E-DRY-CAGTK-106, there are no compliance monitoring or record keeping requirements for storage tanks equipped with submerged/bottom fill.
  - (2) For Emission Points E-TKF-TK-403, E-TKF-TK-408, E-TKF-TK-411, E-TKF-TK-412, E-PLY-TK-150, E-PLY-TK-152 and E-PLY-MRSSTK, the owner or operator shall maintain, on site, Material Safety Data Sheets (MSDSs) for VOCs contained in storage tanks exempt from the equipment standards of District Regulation 6.13 or 7.12 based on vapor pressure.
- ii. For Emission Points subject to Regulation 6.24:
  - (1) When Monomer Recovery System (C-PLY-MRS) is operational, the owner or operator shall, on a daily basis, obtain a post-stripping monomer sample to be analyzed for residual acrylonitrile and butadiene.

(2) The owner or operator shall calculate and record the average calendar monthly post-stripping residual acrylonitrile and butadiene ppm concentrations based on post-stripping sampling conducted during the calendar month.

- (3) For Control Device C-TKF-100CFU: There are no compliance monitoring or record keeping requirements.
- iii. For Emission Points subject to Regulation 6.43: The owner or operator shall maintain production records which include product type and total daily production (dry weight) by product type. These records, along with material-balance-based VOC Emission Factors for each product type manufactured, will be utilized to calculate daily VOC emissions, and to demonstrate compliance with the daily plant-wide emission limit of Specific Condition <a href="S1.a.iii">S1.a.iii</a>. (Regulation 1.05 Daily VOC Compliance Plan initially submitted to the District on May 17, 1993, and revised per Zeon's April 15, 1997 TV Operating Permit Initial Application) (See Comment 8)
- iv. For Emission Points E-PLY-PAMU, E-PLY-TK-14G, E-PLY-TK-15G, E-PLY-TK-16G, E-PLY-TK-103C, E-PLY-PLY-37, E-PLY-PLY-38, E-PLY-S/WTK-HL-191B, E-DRY-CAGTK-103, E-DRY-PSTK-301, E-DRY-PSSCR-301A, E-DRY-PSTK-306, E-DRY-PSTK-302, E-DRY-PSSCR-302A, E-DRY-PSTK-303A, E-DRY-PSSCR-302B, E-DRY-PSTK-303B, E-DRY-PSSCR-303, E-DRY-PSTK-304, E-DRY-PSSCR-304, E-DRY-PSPRS-300, E-DRY-PSDR, E-PEL-PEL-1, E-PEL-TK-2 and E-PEL-SEP-2 subject to Regulation 7.25:
  - (1) For Emission Points E-PLY-PAMU, E-PLY-TK-14G, E-PLY-TK-15G, E-PLY-TK-16G, E-PLY-TK-103C, E-PLY-S/WTK-HL-191B, E-DRY-CAGTK-103, E-DRY-PSTK-301, E-DRY-PSSCR-301A, E-DRY-PSTK-306, E-DRY-PSTK-302, E-DRY-PSSCR-302A, E-DRY-PSTK-303A, E-DRY-PSSCR-302B, E-DRY-PSTK-303B, E-DRY-PSSCR-303, E-DRY-PSTK-304, E-DRY-PSSCR-304, E-DRY-PSPRS-300, E-DRY-PSDR, E-PEL-PEL-1, E-PEL-TK-2 and E-PEL-SEP-2, there are no compliance monitoring or record keeping requirements.(See Comment 3, Comment 4, Comment 5, and Comment 6)
  - (2) For Emission Points E-PLY-PLY-37 and E-PLY-PLY-38:
    - (a) The owner or operator shall keep records for times Control Device C-PLY-TCO is not in operation while Emission Point E-PLY-PLY-37 or E-PLY-PLY-38 is in operation and venting of E-PLY-PLY-37 or E-PLY-PLY-38 occurs.
    - (b) The owner or operator shall, during each operating cycle of the Thermal Catalytic Oxidizer (C-PLY-TCO) whenever Emission Point E-PLY-PLY-37 or E-PLY-PLY-38 is in operation and venting of emissions occur, monitor and record Control Device C-PLY-TCO catalyst bed temperature continuously.
- v. For Emission Point E-MSC-PRTWSH subject to Regulation 6.18:

(1) The owner or operator shall maintain records that include the following for each purchase: (Regulation 6.18, Section 4.4.2)

- (a) The name and address of the solvent supplier,
- (b) The date of the purchase,
- (c) The type of the solvent, and
- (d) The vapor pressure of the solvent measured in mmHg at  $20^{\circ}$ C (68°F).

#### b. **PM**

- i. For Control Devices C-SDR-1SD and C-SDR-2SD:
  - (1) For Emission Points E-SDR-1SD and E-SDR-1SDHPR-1, required to be controlled by Control Device C-SDR-1SD, the owner or operator shall, for days on which latex is being fed to No. 1 Spray Dryer (E-SDR-1SD), monitor and record, on a daily basis, Control Device C-SDR-1SD system differential pressure for proper operation. The standard operating range is 1 to 25 in. of water. The owner or operator shall maintain the daily records of the system differential pressure or a declaration that No. 1 Spray Dryer did not process latex any time during any given day. (See Comment 9)
  - (2) For Emission Point E-SDR-2SD, including E-SDR-2SDCYC and E-SDR-2SDRP, required to be controlled by Control Device C-SDR-2SD, the owner or operator shall, for days on which latex is being fed to No. 2 Spray Dryer (E-SDR-2SD), monitor and record, on a daily basis, Control Device C-SDR-2SD system differential pressure for proper operation. The standard operating range is 1 to 25 in. of water. The owner or operator shall maintain the daily records of the system differential pressure or a declaration that No. 2 Spray Dryer did not process latex any time during any given day. (See Comment 9)
  - (3) The owner or operator shall monitor and maintain the following records that identify all periods of bypassing Control Device C-SDR-1SD while an associated PM Emission Point is in operation:
    - (a) Date;
    - (b) Duration (including start and stop time) of each bypass event:
    - (c) Identification of the Control Device and associated Emission Point(s) in operation at the time of bypass event;
    - (d) PM emissions during bypass event;
    - (e) Summary information on the cause for each bypass event;
    - (f) Corrective action taken to minimize extent of the bypass event; and
    - (g) Measures implemented to prevent reoccurrence of event.

(4) The owner or operator shall perform a monthly visual inspection of the structural and mechanical integrity of Control Device C-SDR-1SD for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components within 15 working days after the equipment defect was first observed. The owner or operator shall maintain monthly records of the results. The records shall include the date of the inspection, the name (or initials) of the person that conducted the inspection, and a brief summary of any equipment defects observed including a list of any components that were replaced or repaired.

ii. For Emission Points E-SDR-1SD and E-SDR-1SDHPR-1, and E-SDR-2SD (including E-SDR-2SDCYC and E-SDR-2SDRP): To demonstrate compliance with Specific Condition S1.b.i.: The owner or operator shall keep records, monthly, of the through-put rate. Utilizing this information along with the Control Device efficiencies and emission factors obtained from the PM stack test required in Specific Condition S4.a.i.(1), the average hourly emissions shall be calculated with the following equation: (See Comment 9)

$$PMEmissions_{\left(\frac{lb\ PM}{hr}\right)_{Average}} = \frac{Process\ Throughput_{\left(\frac{lb\ Throughput}{Month}\right)} \times Emission\ Factor_{\left(\frac{lb\ PM}{lb\ Throughput}\right)}}{Process\ Operational\ Time_{\left(\frac{hrs}{Month}\right)}}$$

iii. For Emission Points E-SDR-1SDSCR-5 (both when optionally recycling material or not optionally recycling material and operating as a closed system), E-SDR-1SDHPR-4, E-SDR-1SDPKG, E-SDR-2SDHPR-1, E-SDR-2SDSEP-1, E-SDR-2SDBPE, E-SDR-2SDBPW, E-DRY-NDR, E-DRY-NCC, E-DRY-NFE-2, E-DRY-NCP, E-DRY-PSDR, E-PEL-SEP-1, E-PEL-SEP-2, E-PEL-CV-2, E-PEL-SEP-3, E-PEL-SEP-4, and E-MSC-EMGEN001 there are no PM compliance monitoring or record keeping requirements for these Emission Points. (See Comment 9 and Comment 11)

#### c. Opacity

For Emission Points E-SDR-1SD, E-SDR-1SDHPR-1, E-SDR-1SDSCR-5 (when optionally recycling material), E-SDR-1SDHPR-4, E-SDR-1SDPKG, E-SDR-2SD, E-SDR-2SDCYC, E-SDR-2SDHPR-1, E-SDR-2SDRP, E-SDR-2SDSEP-1, E-SDR-2SDBPE, E-SDR-2SDBPW, E-DRY-NDR, E-DRY-NCC, E-DRY-NFE-2, E-DRY-NCP, E-DRY-PSDR, E-PEL-SEP-1, E-PEL-SEP-2, E-PEL-CV-2, E-PEL-SEP-3, E-PEL-SEP-4, and E-MSC-EMGEN001 subject to the opacity standard: (See Comment 13 and Comment 14)

i. The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Points (stacks). No more than four stacks shall be observed simultaneously.

ii. At stacks where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions, in accordance with 40 CFR Part 60 Appendix A, within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, according to Regulation 1.07, and take all practical steps to eliminate the exceedance.

- iii. The owner or operator shall maintain monthly records of the results of all visible emissions surveys and Method 9 tests performed. Records of the results of any visible emissions survey shall include the date and time of the survey, the name (or initials) of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an Emission Point is not being operated during a given month, or if all Emission Points venting through any given stack are not being operated during a given month, then no visible emissions survey needs to be performed and a negative declaration may be entered into the record.
- iv. Emission Point E-SDR-1SDSCR-5, when not optionally recycling material, is a closed system, and no opacity monitoring and record keeping are required.
- v. For Emission Point E-MSC-EMGEN001, the owner or operator shall conduct a one-minute visible emissions survey of the exhaust from the generator stack, each month during maintenance test runs. Such visible emissions surveys shall be conducted under normal operation and during daylight hours. If no maintenance test runs are made during a month, then a record shall be made to that effect. (Permit 183-07-C)

#### d. TAC

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.
- iii. For the MRS (Monomer Recovery System) Vent Control System's Thermal Oxidizer Control Device C-PLY-MRV-TO, when operating and controlling the vent stream from the Monomer Recovery System (C-PLY-MRS):
  - (1) The owner or operator shall, when the Thermal Oxidizer (C-PLY-MRV-TO) is being used to control the Monomer Recovery System vent stream, monitor and record the combustion temperature of the Thermal Oxidizer (C-PLY-MRV-TO) continuously. If all combustion temperature readings are greater than the minimum allowable temperature, a negative declaration may be entered into the record.

(2) The owner or operator shall maintain a record showing the dates and times (start and stop) each Control Device (Thermal Oxidizer C-PLY-MRV-TO or Thermal Catalytic Oxidizer C-PLY-TCO) is in use for the Monomer Recovery System vent stream (C-PLY-MRS).

- (3) The owner or operator shall keep a record showing the dates and times (start and stop) that the Monomer Recovery System vent stream is being held in the MRS Vent Control System's Buffer Tank(s) TO-BTTK-1 and TO-BTTK-2.
- (4) During any time that the Monomer Recovery System vent stream (C-PLY-MRS) is discharged to the atmosphere uncontrolled, the owner or operator shall maintain records of the date, start time, stop time, and the amount of material discharged to the atmosphere.
- iv. For the MRS (Monomer Recovery System) Vent Control System's Thermal Catalytic Oxidizer Control Device C-PLY-TCO, when operating and controlling the vent stream from the Monomer Recovery System (C-PLY-MRS):
  - (1) The owner or operator shall, during each operating cycle of the TCO, monitor and record the catalyst bed temperature of the Thermal Catalytic Oxidizer (C-PLY-TCO) continuously. If all catalyst bed temperature readings are greater than the minimum temperature, a negative declaration may be entered into the record.
  - (2) The owner or operator shall keep a record of the maximum design capacity fan speed (air blower) in scfm for the Thermal Catalytic Oxidizer.
  - (3) The owner or operator shall maintain a record showing the dates and times (start and stop) each Control Device (Thermal Catalytic Oxidizer C-PLY-TCO or Thermal Oxidizer C-PLY-MRV-TO) is in use for the Monomer Recovery System vent stream (C-PLY-MRS).
  - (4) The owner or operator shall keep a record showing the dates and times (start and stop) that the Monomer Recovery System vent stream is being held in the MRS Vent Control System's Buffer Tank(s) TO-BTTK-1 and TO-BTTK-2.
  - (5) During any time that the Monomer Recovery System vent stream is discharged to the atmosphere uncontrolled, the owner or operator shall maintain records of the date, start time, stop time, and the amount of material discharged to the atmosphere.
- v. For the Regenerative Thermal Oxidizer Control Device C-SDR-2SDRTO, controlling Emission Points E-SDR-2SD and E-SDR-2SDCYC, when latex is being fed to No. 2 Spray Dryer:
  - (1) The owner or operator shall monitor and record the combustion temperature of the Regenerative Thermal Oxidizer continuously

when Control Device C-SDR-2SDRTO is being used to control the No. 2 Spray Dryer vent stream and latex is being fed to the No. 2 Spray Dryer.

- (2) For normal operation, when latex is being fed to No. 2 Spray Dryer, the owner or operator shall monthly calculate and maintain a record of the monthly and calendar year-to-date controlled emissions of the acrylonitrile.
- (3) For allowed emergency shutdown events, when the No. 2 Spray Dryer vent stream is discharged to the atmosphere uncontrolled for TACs, the owner or operator shall monthly maintain records of the date, start time, stop time and the amount of the acrylonitrile, 1,3-butadiene and styrene discharged to the atmosphere uncontrolled. The owner or operator shall also monthly maintain a record of the monthly and calendar year-to-date uncontrolled emissions of the acrylonitrile, 1,3-butadiene and the styrene.
- vi. For Emission Points E-PLY-PLY-37 and E-PLY-PLY-38:

When Emission Points E-PLY-PLY-37 and E-PLY-PLY-38 are processing recipe grades with uncontrolled TAC emissions above the individual TAC de minimis levels and venting uncontrolled, the owner or operator shall calculate the emissions of each involved individual TAC during each Control Device C-PLY-TCO by-pass event and determine if emissions have exceeded environmentally acceptable limits established by modeling or derived from default de minimis levels provided by the District. (See Comment 16)

- vii. For the average monthly post-stripping latex residual monomer level limits for NBR Bale Rubber, NBR Powder Rubber, and NBR Liquid Rubber product types as listed in Specific Condition \$1.d.vi:
  - (1) For NBR Bale Rubber:

When the Monomer Recovery System (C-PLY-MRS) is operational and NBR Bale Rubber is being processed during the specified time period, the owner or operator shall, on a daily basis, obtain a post-stripping latex residual monomer sample to be analyzed for residual acrylonitrile and residual butadiene.

(2) For NBR Powder Rubber:

When the Monomer Recovery System (C-PLY-MRS) is operational and NBR Powder Rubber is being processed during the specified time period, the owner or operator shall, on a daily basis, obtain a post-stripping latex residual monomer sample to be analyzed for residual acrylonitrile and residual butadiene.

(a) When the owner or operator completes 150 daily samples and six calendar months of data for average monthly post-stripping latex residual monomer levels of NBR Powder Rubber without exceeding the average monthly post-stripping latex residual monomer level limits as listed in

Specific Condition <u>\$1.d.vi</u>, the owner or operator may reduce sample collection frequency from daily to weekly.

### (3) For NBR Liquid Rubber:

When the Monomer Recovery System (C-PLY-MRS) is operational and NBR Liquid Rubber is being processed during the specified time period, the owner or operator shall, on a daily basis, obtain a post-stripping latex residual monomer sample to be analyzed for residual acrylonitrile and residual butadiene.

- (a) When the owner or operator completes 100 daily samples and six calendar months of data for average monthly post-stripping latex residual monomer levels of NBR Liquid Rubber without exceeding the average monthly post-stripping latex residual monomer level limits as listed in Specific Condition S1.d.vi, the owner or operator may reduce sample collection frequency from daily to weekly.
- (4) The owner or operator shall calculate and record the average calendar month post-stripping latex residual acrylonitrile and residual butadiene ppm concentrations for each of the NBR Bale Rubber, NBR Powder Rubber, and NBR Liquid Rubber product types based on the post-stripping latex residual monomer sampling conducted for each product type during that calendar month.

#### e. $NO_x$

There are no compliance monitoring or record keeping requirements for  $NO_x$ . (See Comment 18 and Comment 19)

### f. Unit Operation

For Emission Point E-MSC-EMGEN001:

- i. The owner or operator shall record, on the first working day after the end of each month, the unit's running time meter reading, and calculate (by difference) and record, the unit's operating time for the previous month, to the nearest tenth of an hour, for compliance with the annual hourly time standard of Specific Condition <u>S1.f.ii.</u>
- ii. As a back-up to Specific Condition S2.f.i, the owner or operator shall, when needed, manually record, monthly, the number of hours the unit was operated that month. For days during the month on which the unit was not operated, a monthly record shall be made of each day that the unit did not run (DNR).
- iii. The owner or operator shall calculate and record, monthly, the monthly and 12 consecutive month total hours of operation of the unit.
- iv. The owner or operator shall record, monthly, the amount of fuel combusted in the unit during that month. The owner or operator may, as an alternate, record an estimate of the amount of fuel combusted based on the run time of the unit.

#### S3. Reporting (Regulation 2.16, Section 4.1.9.3)

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance reports for: Note, if no deviations occur in the reporting time period, then the owner or operator shall report a negative declaration. Also, duplicative reporting is not required. For example, information required to be submitted in a MACT Report is not also required to be submitted in the Title V Semiannual Compliance Report. (See General Condition 14 for the Semiannual Compliance Report submittal dates.)

#### a. **VOC**

- i. For Emission Points E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, E-TKF-TK-109, E-TKF-TK-401, E-TKF-TK-402, E-TKF-TK-403, E-TKF-TK-404, E-TKF-TK-405, E-TKF-TK-406, E-TKF-TK-407, E-TKF-TK-408, E-TKF-TK-409, E-TKF-TK-410, E-TKF-TK-411, E-TKF-TK-412, E-PLY-TK-307N, E-PLY-TK-304, E-PLY-TK-305, E-PLY-TK-306, E-PLY-TK-150, E-PLY-TK-152, E-PLY-MRSSTK and E-DRY-CAGTK-106, subject to Regulations 6.13 and 7.12: There are no compliance reporting requirements.
- ii. For Emission Points subject to Regulation 6.24:
  - (1) The beginning and ending date of the reporting period
  - (2) Identify all periods of exceedance of the average monthly poststripping residual monomer levels of 6,870 ppm acrylonitrile and 810 ppm butadiene including the quantity of excess concentration levels
  - (3) Description of any corrective action taken for each exceedance
- iii. For Emission Points subject to Regulation 6.43:
  - (1) The beginning and ending date of the reporting period
  - (2) Identify all periods of an exceedance of the daily plant-wide VOC emission standard including the quantity of excess emissions
  - (3) Description of any corrective action taken for each exceedance
  - (4) A negative declaration if there was not an exceedance of the daily plant-wide VOC emission standard
- iv. For Emission Points E-PLY-PAMU, E-PLY-TK-14G, E-PLY-TK-15G, E-PLY-TK-16G, E-PLY-TK-103C, E-PLY-PLY-37, E-PLY-PLY-38, E-PLY-S/WTK-HL-191B, E-DRY-CAGTK-103, E-DRY-PSTK-301, E-DRY-PSSCR-301A, E-DRY-PSTK-306, E-DRY-PSTK-302, E-DRY-PSSCR-302A, E-DRY-PSTK-303A, E-DRY-PSSCR-302B, E-DRY-PSTK-303B, E-DRY-PSSCR-303, E-DRY-PSTK-304, E-DRY-PSSCR-304, E-DRY-PSPRS-300, E-DRY-PSDR, E-PEL-PEL-1, E-PEL-TK-2 and E-PEL-SEP-2, subject to Regulation 7.25:
  - (1) For Emission Point E-PLY-PLY-38:
    - (a) Emission Unit ID and Emission Point ID
    - (b) The beginning and ending date of the reporting period

(c) Identification of each period of time (date, start time, and stop time) that Control Device C-PLY-TCO was not in operation and E-PLY-PLY-38 was in operation and venting uncontrolled

- (d) Identification of each period of time (date, start time and stop time) when Control Device C-PLY-TCO did not operate at or above the minimum catalyst bed temperature of 450°F while controlling emissions vented from E-PLY-PLY-38
- (e) Identification of each period of time (date, start time and stop time) when Control Device C-PLY-TCO catalyst bed temperature was not monitored continuously while emissions from E-PLY-PLY-38 were vented to Control Device C-PLY-TCO
- (f) Description of any corrective action taken for each identified exceedance
- (g) A negative declaration if there was no exceedance
- (2) For Emission Points E-PLY-PAMU, E-PLY-TK-14G, E-PLY-TK-15G, E-PLY-TK-16G, E-PLY-TK-103C, E-PLY-PLY-37, E-PLY-S/WTK-HL-191B, E-DRY-CAGTK-103, E-DRY-PSTK-301, E-DRY-PSSCR-301A, E-DRY-PSTK-306, E-DRY-PSTK-302, E-DRY-PSSCR-302A, E-DRY-PSTK-303A, E-DRY-PSSCR-302B, E-DRY-PSTK-303B, E-DRY-PSSCR-303, E-DRY-PSTK-304, E-DRY-PSSCR-304, E-DRY-PSPRS-300, E-DRY-PSDR, E-PEL-PEL-1, E-PEL-TK-2 and E-PEL-SEP-2 subject to Regulation 7.25, There are no compliance reporting requirements for these Emission Points. (See Comment 3, Comment 4, Comment 5, Comment 6, and Comment 7)
- v. For Control Devices Monomer Recovery System (C-PLY-MRS) and the Thermal Catalytic Oxidizer (C-PLY-TCO):
  - (1) Emission Unit ID and Emission Point ID
  - (2) The beginning and ending date of the reporting period
  - (3) Identification of parameter that is being monitored
  - (4) Number and type of repairs instituted during the reporting period
  - (5) Description of any corrective action taken
- vi. For Emission Point E-MSC-PRTWSH subject to Regulation 6.18, there is no routine VOC compliance reporting requirements for Regulation 6.18.

#### b. PM

i. For Control Device C-SDR-1SD required for Emission Points E-SDR-1SD and E-SDR-1SDHPR-1: (See Comment 9)

(1) The owner or operator shall report any deviation from the requirement to perform the required monthly visual inspections of C-SDR-1SD.

- (2) The owner or operator shall report any periods of bypassing Control Device C-SDR-1SD while Emission Points E-SDR-1SD and E-SDR-1SDHPR-1 were in operation during the reporting period, including the information required by <u>S2.b.i</u> or a negative declaration if there were no periods of bypassing the Control Device during the reporting period.
- (3) Identify all periods of exceedance of the PM emission standard for each Emission Point including the quantity of excess emissions
- (4) Description of any corrective action taken for each exceedance
- ii. For Emission Points E-SDR-1SDSCR-5 (both when optionally recycling material and when operating as a closed system (*i.e.*, not optionally recycling material)), E-SDR-1SDHPR-4, E-SDR-1SDPKG, E-SDR-2SD (including E-SDR-2SDCYC and E-SDR-2SDRP), E-SDR-2SDHPR-1, E-SDR-2SDSEP-1 (including E-SDR-2SDBPE and E-SDR-2SDBPW), E-DRY-NDR, E-DRY-NCC (including E-DRY-NCP), E-DRY-NFE-2, E-DRY-PSDR, E-PEL-SEP-1, E-PEL-SEP-2, E-PEL-CV-2, E-PEL-SEP-3, E-PEL-SEP-4 and E-MSC-EMGEN001:

There are no compliance reporting requirements for these Emission Points. (See Comment 9)

#### c. **Opacity**

For Emission Points E-SDR-1SD, E-SDR-1SDHPR-1, E-SDR-1SDSCR-5 (when optionally recycling material), E-SDR-1SDHPR-4, E-SDR-1SDPKG, E-SDR-2SD, E-SDR-2SDCYC, E-SDR-2SDHPR-1, E-SDR-2SDRP, E-SDR-2SDSEP-1, E-SDR-2SDBPE, E-SDR-2SDBPW, E-DRY-NDR, E-DRY-NCC, E-DRY-NFE-2, E-DRY-NCP, E-DRY-PSDR, E-PEL-SEP-1, E-PEL-SEP-2, E-PEL-CV-2, E-PEL-SEP-3, E-PEL-SEP-4 and E-MSC-EMGEN001 subject to the opacity standard:

- i. Emission Unit ID, Stack ID (or Emission Point ID)
- ii. The beginning and ending date of the reporting period
- iii. The number of surveys where visible emissions were observed
- iv. The date, time, and results of each Method 9 that exceeded the opacity standard
- v. Description of any corrective action taken

#### d. TAC

i. Within 6 months of a change that impacts the demonstration of environmental acceptability, the owner or operator shall submit the reevaluated EA demonstration to the District.

ii. For the MRS (Monomer Recovery System) Vent Control System's Thermal Oxidizer Control Device C-PLY-MRV-TO, when operating and controlling the vent stream from the Monomer Recovery System (C-PLY-MRS):

- (1) The beginning and ending date of the reporting period
- (2) Identify all periods when C-PLY-MRV-TO is controlling the Monomer Recovery System vent stream and the combustion temperature falls below the minimum, including date, start time, and stop time.
- (3) Identify all periods the Monomer Recovery System discharges to the atmosphere uncontrolled, including the date, start time, stop time and amount of material discharged
- (4) Description of any corrective action taken for each exceedance
- iii. For Control Device C-PLY-TCO when operating and controlling the vent stream from the Monomer Recovery System (C-PLY-MRS):
  - (1) The beginning and ending date of the reporting period
  - (2) Identify all periods when C-PLY-TCO is controlling the C-PLY-MRS vent stream and the catalyst bed temperature falls below the minimum, including date, start time, and stop time
  - (3) Identify all periods Control Device C-PLY-MRS discharges to the atmosphere uncontrolled, including the date, start time, stop time and amount of material discharged
  - (4) Description of any corrective action taken for each exceedance
- iv. For Control Device C-SDR-2SDRTO controlling Emission Point E-SDR-2SD, including E-SDR-2SDCYC, when latex is being fed to No. 2 Spray Dryer:
  - (1) The beginning and ending date of the reporting period
  - (2) Identify all periods when latex is being fed to No. 2 Spray Dryer, Control Device C-SDR-2SDRTO is controlling the No. 2 Spray Dryer vent stream and the combustion temperature falls below the minimum, including date, start time, and stop time
  - (3) Identify all emergency shutdown events when No. 2 Spray Dryer discharges to the atmosphere uncontrolled for TACs, including the date, start time, stop time and amount of each involved individual TAC discharged
  - (4) The monthly and calendar year-to-date controlled emissions of acrylonitrile, and the monthly and calendar year-to-date uncontrolled emissions of each individual TAC (acrylonitrile, 1,3-butadiene and styrene) during emergency shutdown events occurring, or a declaration that no emergency shutdown events occurred
  - (5) Description of any corrective action taken for each exceedance

v. For Emission Point E-PLY-PLY-37 or E-PLY-PLY-38 when venting uncontrolled and Control Device C-PLY-TCO is bypassed or malfunctioning: (See Comment 16)

- (1) Emission Unit and Emission Point ID
- (2) The beginning and ending date of the reporting period
- (3) Identification of each bypass event (date, start time, and stop time)
- (4) Individual TAC emissions resulting from bypass event, including determination if TAC emissions have exceeded environmentally acceptable levels established by modeling or derived from de minimis levels provided by the District
- (5) Reasons for excess emissions whether process upset, Control Device malfunction, other known causes, or unknown causes
- (6) Description of any corrective action taken for each identified exceedance
- (7) A negative declaration if there were no bypass events.
- vi. For the average monthly post-stripping latex residual monomer level limits for NBR Bale Rubber, NBR Powder Rubber, and NBR Liquid Rubber as listed in Specific Condition <u>S1.d.vi</u>:
  - (1) The beginning and ending date of the reporting period
  - (2) Identify all periods of exceedance of any of the average monthly post-stripping latex residual monomer levels for NBR Bale Rubber (100 ppm acrylonitrile and 10 ppm butadiene), NBR Powder Rubber (100 ppm acrylonitrile and 25 ppm butadiene), and NBR Liquid Rubber (250 ppm acrylonitrile and 25 ppm butadiene), including the quantity of excess average monthly post-stripping latex residual monomer concentration levels and the resultant TAC emissions.
  - (3) Description of any corrective action taken for each exceedance

#### e. $NO_x$

There are no routine reporting requirements for Emission Point E-MSC-EMGEN001 for this pollutant. (See Comment 18 and Comment 19)

## f. Unit Operation

For Emission Point E-MSC-EMGEN001:

- i. The Company name
- ii. The beginning and ending date of the reporting period.
- iii. The calendar month and consecutive 12-month generator operation hours for each month in the reporting period.
- iv. Identification and description of all periods of deviations from the permit requirements.

v. If no deviations from permit requirements occur during a reporting period, the owner or operator shall submit a negative declaration stating that no permit deviations occurred during the reporting period.

### S4. Source Testing (Regulation 2.16, Section 4.1.9.1)

#### a. Required Performance Testing for Emission Unit U-ZN

- i. Once during the permit term, the owner or operator shall perform the following performance tests:
  - (1) PM Testing -- For Control Devices C-SDR-1SD and C-SDR-2SD, the owner or operator shall:
    - Determine PM/PM<sub>10</sub> emission factor for Control Devices C-SDR-1SD and C-SDR-2SD to demonstrate that Emission Points E-SDR-1SD and E-SDR-2SD do not exceed the PM standards listed in Table 1 of Regulation 6.09 per Specific Condition S1.b.i.
  - (2) TAC Testing -- For Control Devices C-PLY-MRV-TO and C-PLY-TCO, when operating and controlling the vent stream from the Monomer Recovery System (C-PLY-MRS), the owner or operator shall test/determine the TAC destruction efficiency utilizing District-approved EPA Test Methods
  - (3) TAC Testing -- For Control Device C-SDR-2SDRTO the owner or operator shall determine percent TAC destruction efficiency for each individual TAC when the highest residual TAC product grade latex is being processed by Emission Point E-SDR-2SD. (See Comment 10 and Comment 15)
- ii. The owner or operator shall submit a written test protocol plan that includes the EPA test methods that will be used for compliance testing, the process operating parameters that will be monitored during the compliance test, and the Control Device performance indicators (e.g. pressure drop) that will be monitored during the compliance test. The test protocol plan shall be furnished to the District at least 30 days prior to the actual date of the compliance test and contain all information outlined in <a href="Protocol Checklist for Performance Test">Protocol Checklist for Performance Test</a> Section at the end of this document.
- iii. The owner or operator shall provide the District at least 10 days prior notice of any compliance test to afford the District the opportunity to have an observer present.
- iv. The owner or operator shall furnish the District with a written report of the results of each compliance test within 60 days following the actual date of completion of the compliance test event.

### b. **Performance Testing Results**

The owner or operator shall utilize the most recent APCD approved performance testing results for determination of future emission factors and estimation of air emissions for purposes of compliance reporting and emissions inventory submissions.

#### **District Regulations Comments**

### VOC

- 1. Zeon has demonstrated average monthly maximum post-stripping residual monomer levels combined with the maximum ratio of SAN to NBR products to be a surrogate for monthly material balance calculations in demonstrating compliance with Regulation 6.24's requirement for a minimum overall 85% VOC emission reduction averaged over a calendar month. Zeon has also demonstrated, in its July 17, 2000 submittal, the maximum ratio of SAN to NBR products necessary to ensure compliance with this requirement cannot be exceeded, and no monitoring and record keeping, or reporting involving this ratio are required.
- 2. The District has approved Zeon to use a calendar month averaging period to comply with the Regulation 6.24 plant-wide 85% total VOC emissions reduction standard for all Emission Points subject to Regulation 6.24.
- 3. Zeon submitted a Regulation 7.25 compliance demonstration based on uncontrolled PTE on 10-22-2012 which reviewed all equipment subject to Regulation 7.25 on-site. The results of the compliance demonstration were used to establish the emission limits listed in Specific Condition S1.a.iv, monitoring and record keeping conditions in S2.a.iv, and reporting conditions listed in S3.a.iv. The source-wide cumulative non-VOC BACT installations total 0.0029 TPY based on potential uncontrolled VOC emissions (E-DRY-CAGTK-103 (0.0029 TPY PTE); E-PLY-S/WTK-HL-191B (0.0000 TPY PTE); and E-PLY-TK-14G, E-PLY-TK-15G and E-PLY-TK-16G (0.00 TPY PTE Total 3 Tanks)). The source-wide cumulative non-VOC BACT APCD Regulation 7.25 "bucket" total is required to be ≤ 5 TPY.
- 4. For Emission Point E-PLY-PAMU, subject to Regulation 7.25, installed 1<sup>st</sup> quarter of 1986, there are no VOC BACT requirements. Affected facilities (E-PLY-PAMU) permitted prior to December 16, 1987, that emit no more emissions than that permitted at such date shall be deemed to be in compliance per Regulation 7.25, Section 3.2. Therefore, Emission Point E-PLY-PAMU was given an annual limit of 0.359 TPY VOC, based on potential emissions calculations.
- 5. Added controls were determined to be uneconomical for TV Emissions Points reviewed in the 07-29-1991 BACT Review. Emissions Points E-DRY-PSTK-301, E-DRY-PSSCR-301A, E-DRY-PSTK-306, E-DRY-PSTK-302, E-DRY-PSSCR-302A, E-DRY-PSTK-303A, E-DRY-PSSCR-302B, E-DRY-PSTK-303B, E-DRY-PSSCR-303, E-DRY-PSTK-304, E-DRY-PSSCR-304, E-DRY-PSPRS-300 and E-DRY-PSDR were given a combined VOC limit of 30.256 TPY based on potential uncontrolled emissions.
- 6. Added controls were determined to be uneconomical for Emission Points included in the 04-09-1998 BACT Review. Emission Points E-PEL-1, E-PEL-TK-2 and E-PEL-SEP-2 were given a combined VOC limit of 5 TPY based on potential uncontrolled emissions.
- 7. For Emission Points E-PLY-TK-103C, E-PLY-PLY-37, and E-PLY-PLY-38, the thermal catalytic oxidizer (C-PLY-TCO) controlling E-PLY-PLY-37 and E-PLY-PLY-38 was deemed VOC BACT by the District per permit application dated 5-12-1995, Title V

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Operating Permit 151-97-TV, application number 34909 dated 4-16-2012, 06-04-2012 VOC BACT Analysis, and Permit 34909-12-C.

8. Regulation 6.43 VOC emission factors as determined by material balance calculations must account for all system parameters including input, generation, output, accumulation, and consumption. Each product's material-balance-based VOC Emission Factor shall account for all system parameters of manufacturing process utilizing the following equation:

Input + Generation = Output + Accumulation + Consumption

#### <u>PM</u>

- 9. Zeon has provided, in its August 24, 2000 submittal, and in Construction Permit 67-10-C Application 11592, dated April 30, 2010 (including its May 28, 2010 Supplement No. 1) one-time PM compliance demonstrations for all PM Emission Points. Only Emission Points E-SDR-1SD, E-SDR-1SDHPR-1, and E-SDR-2SD (including E-SDR-2SDCYC, and E-SDR-2SDRP) require a Control Device for the compliance demonstration. Consequently, only the Title V Control Devices associated with these Emission Points, C-SDR-1SD and C-SDR-2SD, must be monitored, as an indicator of performance, to demonstrate on-going compliance with the applicable emission standard.
- 10. The discharge vent stream from existing fabric filter Title V Control Device C-SDR-2SD is ducted directly to the No. 2 Spray Dryer Regenerative Thermal Oxidizer C-SDR-2SDRTO. Consequently, APCD has approved use of a capture efficiency of 100% for this control, and the performance of a capture efficiency test using EPA guidelines is not applicable.
- 11. The District has determined that compliance with the PM standard for Emission Point E-MSC-EMGEN001 is demonstrated by a one-time determination using AP-42 emission factors along with maximum fuel consumption data and/or brake horsepower rating.
- 12. Allowable rate of particulate emissions based on process weight for affected facilities:

Table 1 to Regulation 6.09:

Process We	Maximum Allowable Emission Rate	
Lb./Hr.	Tons/Hr.	Lb./Hr.
≤1,000	≤0.50	2.58
1,500	0.75	3.38
2,000	1.00	4.10
2,500	1.25	4.76
3,000	1.50	5.38
3,500	1.75	5.96

Process We	Maximum Allowable Emission Rate	
Lb./Hr.	Tons/Hr.	Lb./Hr.
4,000	2.00	6.52
5,000	2.50	7.58
6,000	3.00	8.56
7,000	3.50	9.49
8,000	4.00	10.4
9,000	4.50	11.2
10,000	5.00	12.0
12,000	6.00	13.6
16,000	8.00	16.5
18,000	9.00	17.9
20,000	10.00	19.2
30,000	15.00	25.2
40,000	20.00	30.5
50,000	25.00	35.4
60,000	30.00	40.0
70,000	35.00	41.3
80,000	40.00	42.5
90,000	45.00	43.6
100,000	50.00	44.6
120,000	60.00	46.3
140,000	70.00	47.8
160,000	80.00	49.1
200,000	100.00	51.3
1,000,000	500.00	69.0
2,000,000	1,000.00	77.6
6,000,000	3,000.00	92.7

Interpolation of the data for process weight rates up to 30.0 tons/hr shall be accomplished by use of the equation:

$$E = 4.10 \, P^{0.67}$$

And interpolation and extrapolation of the data for process weight rates in excess of 30.0 tons/hr shall be accomplished by the use of the equation:

$$E = 55.0 \, P^{0.11} - 40$$

Where:

E = rate of emission in lb/hr.

P = process weight in tons/hr.

**Table 1 to Regulation 7.08:** 

Process W	Maximum Allowable Emission Rate	
Lb./Hr.	Tons/Hr.	Lb./Hr.
≤1,000	≤0.50	2.34
1,500	0.75	3.00
2,000	1.00	3.59
2,500	1.25	4.12
3,000	1.50	4.62
3,500	1.75	5.08
4,000	2.00	5.52
5,000	2.50	6.34
6,000	3.00	7.09
7,000	3.50	7.81
8,000	4.00	8.48
9,000	4.50	9.12
10,000	5.00	9.74
12,000	6.00	10.90
16,000	8.00	13.03
18,000	9.00	14.02
20,000	10.00	14.97
30,000	15.00	19.24
40,000	20.00	23.00
50,000	25.00	26.41
60,000	30.00	29.57
70,000	35.00	30.57
80,000	40.00	31.23

Process W	Maximum Allowable Emission Rate	
Lb./Hr.	Tons/Hr.	Lb./Hr.
90,000	45.00	31.83
100,000	50.00	32.37
120,000	60.00	33.33
140,000	70.00	34.16
160,000	80.00	34.90
200,000	100.00	36.17
1,000,000	500.00	46.79
2,000,000	1,000.00	52.28
6,000,000	3,000.00	62.32

Interpolation of the data for process weight rates up to 60,000 lb/hr shall be accomplished by use of the equation:

$$E = 3.59 P^{0.62}$$

And interpolation and extrapolation of the data for process weight rates in excess of 60,000 lb/hr shall be accomplished by the use of the equation:

$$E = 17.31 P^{0.16}$$

Where:

E = rate of emission in lb/hr.

P = process weight in tons/hr.

#### Opacity

- 13. Zeon has conducted Visible Emissions Surveys at PM Emission Points since its current Title V Operating Permit No. 151-97-TV(R2) first became effective on December 30, 2001 as Permit No. 151-97-TV. Zeon conducted these surveys in accordance with Additional Condition (AC) 2.d. of that Permit, and has not observed visible emissions at any stack during any of these required Visible Emissions Surveys. Zeon currently performs Visible Emissions Surveys at all required stacks on a monthly basis, and will continue to do so under this Renewal Title V Operating Permit No. 151-97-TV (R3) at the same monthly frequency.
- 14. There is no visible emissions survey requirement for existing No. 2 Spray Dryer Stack S-SDR-2SD when in use for an allowed emergency shutdown event. During such event, the latex feed to No. 2 Spray Dryer is cut-off automatically, and the volume of air remaining in the No. 2 Spray Dryer System that still contains a small amount of TACs is discharged, uncontrolled, to the atmosphere through Stack S-SDR-2SD. Each such uncontrolled discharge is less than one minute in duration, which is not sufficient time to conduct a visible emissions survey.

#### **TAC**

15. Different latex product grades processed by No. 2 Spray Dryer represent the highest individual TAC emissions. Therefore, the owner or operator can test separate products for the individual TAC destruction efficiencies on non-consecutive runs and/or dates in order to allow the source the necessary time to effect the product grade change. (*i.e.*, clean the No. 2 Spray Dryer system and manage the latex inventory). This method provides the most representative conditions for determining future emission factors as required in Specific Condition S4.

- 16. The potential controlled TAC emissions associated with new individual STAR process PLY38 (Emission Point E-PLY-PLY-38) have been demonstrated to be de minimis based on EA demonstration submitted by Zeon with application number 34909. Emission point E-PLY-PLY-37 is part of an **existing STAR process** meeting required EA goals, but has only been required to analyze Category 1 and Category 2 TAC's, while E-PLY-PLY-38 (**new STAR Process**) has been analyzed for Category 1-4 TACs. Emission Point E-PLY-PLY-37 was incorporated into monitoring, record keeping, and reporting requirements of PLY38 because both E-PLY-PLY-37 and E-PLY-PLY-38 share a common stack, preceding process vessels, and control device. Therefore, the District determined incorporation of E-PLY-PLY-37 was essential to determine on-going compliance with STAR EA goals for E-PLY-PLY-38.
- 17. Emission Point E-MSC-EMGEN001 is subject to the STAR program (new individual process) and has been determined it meets environmental acceptability requirements. The risk factor was determined to be 1.97 for industrial property and 0.678 for non-industrial property. Tier 4 modeling was performed with AerMod for a stack height of 4.75 meter for diesel particulate emissions. The results were then multiplied by an intermittency factor to represent the 500 hour operating limit. (See Permit 183-07-C)

#### $NO_x$

- 18. The District has determined that diesel engine generator sets used solely for emergency or backup service are not subject to Regulation 7.08, Section 4.
- 19. Potential emissions for Emission Point E-MSC-EMGEN001 are greatest for nitrogen oxides ( $NO_x$ ). Based on AP-42 Emission Factors and an operational limit of 500 hours per year, the potential  $NO_x$  emissions for this permitted operation are less than 5 tons per year.

# Appendix A: 40 CFR Part 63 Subpart U

### S1. Standards (Regulation 2.16, Section 4.1.1)

- a. HAP (Non-LDAR 40 CFR Part 63 Subpart U) (See Comment 1 and Comment 2)
  - For Emission Points E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, E-TKF-TK-109, E-TKF-TK-401, E-TKF-TK-402, E-TKF-TK-403, E-TKF-TK-404, E-TKF-TK-405, E-TKF-TK-406, E-TKF-TK-407, E-TKF-TK-408, E-TKF-TK-409, E-TKF-TK-410, E-TKF-TK-411, E-TKF-TK-412, E-PLY-TK-307N, E-PLY-TK-304, E-PLY-TK-305 and E-PLY-TK-306 defined as Storage Vessels per 40 CFR 63.482:
    - (1) When each Storage Vessel is storing material predominantly associated with nitrile butadiene rubber (NBR) production that contains no organic HAP, or organic HAP as impurities only, each is not subject to the requirements of 40 CFR Part 63 Subpart U or to the provisions of 40 CFR Part 63 Subpart A. (40 CFR 63.480(c)(8) and 40 CFR 63.482 (Definition of Storage Vessel))
    - (2) When each of Storage Vessels E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108 and E-TKF-TK-109 is storing organic HAP-containing raw materials predominantly associated with NBR production:
      - (a) For Storage Vessels E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107 and E-TKF-TK-108:

There are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart U for Group 2 Storage Vessels. (Table 3 to 40 CFR Part 63 Subpart U and 40 CFR 63.119 as referenced by 40 CFR 63.484(a), with the differences noted in 40 CFR 63.484(c) through (s), as applicable)

[Each storage vessel has a capacity greater than or equal to 75 m³ (19,815 gallons) but less than 151 m³ (39,894.2 gallons) and the maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mm Hg), therefore each storage vessel is a Group 2 Storage Vessel.]

(b) For Storage Vessel E-TKF-TK-109:

There are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart U for Group 2 Storage Vessels. (40 CFR 63.482 (Definitions of Group 2 Storage Vessel and Storage Vessel), Table 3 to 40 CFR Part 63 Subpart U and 40 CFR 63.119 as referenced by 40 CFR 63.484(a),

with the differences noted in 40 CFR 63.484(c) through (s), as applicable)

[Storage vessel has a capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons) and it may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature. It is a Group 2 Storage Vessel.]

- (3) For Storage Vessels E-TKF-TK-401, E-TKF-TK-402, E-TKF-TK-403, E-TKF-TK-404, E-TKF-TK-405, E-TKF-TK-406, E-TKF-TK-407, E-TKF-TK-408, E-TKF-TK-409, E-TKF-TK-410, E-TKF-TK-411, E-TKF-TK-412, E-PLY-TK-307N, E-PLY-TK-304, E-PLY-TK-305 and E-PLY-TK-306:
  - (a) Storage Vessels E-TKF-404 and E-TKF-TK-410:

There are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart U for Group 2 Storage Vessels. (Table 3 to 40 CFR Part 63 Subpart U and 40 CFR 63.119 as referenced by 40 CFR 63.484(a), with the differences noted in 40 CFR 63.484(c) through (s), as applicable)

[Each storage vessel has a capacity greater than or equal to 75 m³ (19,815 gallons) but less than 151 m³ (39,894.2 gallons) and the maximum true vapor pressure of the total organic HAP at storage temperature is less than 13.1 kPa (98.24 mm Hg), therefore each storage vessel is a Group 2 Storage Vessel.]

(b) Storage Vessels E-TKF-TK-401, E-TKF-TK-402, E-TKF-TK-403, E-TKF-TK-405, E-TKF-TK-406, E-TKF-TK-407, E-TKF-TK-408 and E-TKF-TK-412:

There are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart U for Group 2 Storage Vessels. (40 CFR 63.482 (Definitions of Group 2 Storage Vessel and Storage Vessel), Table 3 to 40 CFR Part 63 Subpart U and 40 CFR 63.119 as referenced by 40 CFR 63.484(a), with the differences noted in 40 CFR 63.484(c) through (s), as applicable)

[Each storage vessel has a capacity less than 75 m³ (19,815 gallons) but greater than or equal to 38 m³ (10,039.6 gallons) and each may therefore store any total organic HAP at any maximum true vapor pressure at storage temperature. Each is a Group 2 Storage Vessel.]

(c) Emission Points E-TKF-TK-409, E-TKF-TK-411, E-PLY-TK-307N, E-PLY-TK-304, E-PLY-TK-305 and E-PLY-TK-306:

There are no applicable non-LDAR standards under 40

CFR Part 63 Subpart U. (40 CFR 63.482 (Definition of Storage Vessel))

[Each emission point has a capacity less than 38 m<sup>3</sup> (10,039.6 gallons), and each is not considered a "Storage Vessel" for the purposes of 40 CFR Part 63 Subpart U.]

- ii. For Emission Points E-PLY-PLY-1, E-PLY-PLY-2, E-PLY-PLY-3, E-PLY-PLY-4, E-PLY-PLY-5, E-PLY-PLY-6, E-PLY-PLY-7, E-PLY-PLY-8, E-PLY-PLY-9, E-PLY-PLY-10, E-PLY-PLY-11, E-PLY-PLY-12, E-PLY-PLY-13, E-PLY-PLY-14, E-PLY-PLY-15, E-PLY-PLY-16, E-PLY-PLY-17, E-PLY-PLY-18, E-PLY-PLY-19, E-PLY-PLY-20, E-PLY-PLY-21, E-PLY-PLY-22, E-PLY-PLY-23, E-PLY-PLY-24, E-PLY-PLY-25, E-PLY-PLY-26, E-PLY-PLY-27, E-PLY-PLY-28, E-PLY-PLY-29, E-PLY-PLY-30, E-PLY-PLY-32, E-PLY-PLY-33, E-PLY-PLY-34, E-PLY-PLY-35, E-PLY-PLY-36, E-PLY-BDTTK-1, E-PLY-BDTTK-2, E-PLY-BDTTK-3, E-PLY-BDTTK-4, E-PLY-BDTTK-5, E-PLY-BDTTK-6, E-PLY-BDTTK-7, E-PLY-BDTTK-10, E-PLY-BDTTK-11, BDTTK-12, E-PLY-BDTTK-14, E-PLY-BDTTK-15, E-PLY-BDTTK-16, E-PLY-BDTTK-17 and E-PLY-BDTTK-18:
  - (1) Each Emission Point listed in Appendix A S1.a.ii has been determined to meet classification requirements of a Group 2 Batch Front-End Process Vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions under 40 CFR Part 63 Subpart U.
  - (2) There are no applicable non-LDAR standards under 40 CFR Part 63 Subpart U. (40 CFR 63.488(d), 40 CFR 63.487(g) and 40 CFR 63.487(h)) (See Comment 3)
- iii. For Emission Points E-PLY-BLTTK-20, E-PLY-BLTTK-21, E-PLY-BLTTK-22, E-PLY-BLTTK-23, E-PLY-BLTTK-24, E-PLY-BLTTK-25, E-PLY-BLTTK-26, E-PLY-BLTTK-31, E-PLY-BLTTK-32, E-PLY-BLTTK-33, E-PLY-BLTTK-34, E-PLY-BLTTK-35, E-PLY-BLTTK-36, E-PLY-BLTTK-37, E-PLY-BLTTK-38, E-PLY-BLTTK-39, E-PLY-NBLT, E-PLY-SBLT, E-PCO-TK-4, E-PCO-TK-5, E-PCO-TK-7, E-PCO-TK-8, E-PCO-TK-9, E-PCO-TK-11 (included with E-PCO-CN-1), E-PCO-CN-1, E-SDR-1BLT, E-SDR-1SD, E-DRY-PSTK-301, E-DRY-PSSCR-301A, E-DRY-PSTK-306, E-DRY-PSTK-302, E-DRY-PSSCR-302A, E-DRY-PSTK-303A, E-DRY-PSSCR-302B, E-DRY-PSTK-303B, E-DRY-PSSCR-303, E-DRY-PSTK-304, E-DRY-PSSCR-304, E-DRY-PSPRS-300, and E-DRY-PSDR, and for, when each is processing NBR, Emission Points E-SDR-2BLT, E-SDR-EBLT, E-SDR-WBLT, E-SDR-2SD, E-SDR-2SDCYC (included with E-SDR-2SD), E-DRY-TK-202, E-DRY-TK-203, E-DRY-TK-204, E-DRY-NTK-15H, E-DRY-NSCR-1, E-DRY-NTK-16H, E-DRY-NTK-17H, E-DRY-NSCR-2, E-DRY-NTK-18H, E-DRY-NPRS-1, E-DRY-NGR-1H and E-DRY-NDR:
  - (1) Each Emission Point listed in Appendix A S1.a.iii has been determined to meet classification requirements for Back-End Process Operations under 40 CFR Part 63 Subpart U.

(2) Organic HAP emissions from back-end processes at affected sources producing NBR shall not exceed the back-end process operation organic HAP emission limitation of 0.000315 Mg organic HAP emissions per Mg of NBR produced (0.630 lb HAP/Ton NBR produced) for any consecutive 12-month period. (40 CFR 63.494(a)(4)(iv)) (See Comment 4)

iv. For 40 CFR Part 63 Subpart U Process Wastewater (as defined in 40 CFR 63.482): (See Comment 5)

All 40 CFR Part 63 Subpart U process wastewater streams have been determined to be Group 2 process wastewater. There are no applicable non-LDAR standards for Group 2 process wastewater. (40 CFR 63.132(a)(3) as referenced by 40 CFR 63.501(a) with the differences noted in 40 CFR 63.501(a)(1) through (a)(23))

- v. The below items shall be followed during periods of non-operation of the affected source or any part thereof: (40 CFR 63.480(j)) (See Comment 6)
  - (1) The emission limitations set forth in 40 CFR Part 63 Subpart U and the emission limitations referred to in 40 CFR Part 63 Subpart U shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which 40 CFR Part 63 Subpart U applies. However, if a period of non-operation of one portion of an affected source does not affect the ability of a particular emission point to comply with the emission limitations to which it is subject, then that emission point shall still be required to comply with the applicable emission limitations of 40 CFR Part 63 Subpart U during the period of non-operation. For example, if there is an overpressure in the reactor area, a storage vessel that is part of the affected source would still be required to be controlled in accordance with the emission limitations in 40 CFR 63.484. (40 CFR 63.480(j)(1)) (See Comment 1)
  - (2) The owner or operator shall not shut down items of equipment that are required or utilized for compliance with 40 CFR Part 63 Subpart U during times when emissions (or, where applicable, wastewater streams or residuals) are being routed to such items of equipment if the shutdown would contravene requirements of 40 CFR Part 63 Subpart U applicable to such items of equipment. (40 CFR 63.480(j)(3))
  - (3) In response to an action to enforce the standards set forth in 40 CFR Part 63 Subpart U, an owner or operator may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by a malfunction, as defined in 40 CFR 63.2. Appropriate penalties may be assessed, however, if the owner or operator fails to meet the burden of proving all the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

    (40 CFR 63.480(j)(4))

To establish the affirmative defense in any action to enforce such a limit, the owners or operators of a facility must timely meet the notification requirements of 40 CFR 63.480(j)(4)(ii), and must prove by a preponderance of evidence that the requirements of 40 CFR 63.480(j)(4)(i)(A) through 63.480(j)(4)(i)(I) were met: (40 CFR 63.480(j)(4)(i))

- (a) The excess emissions were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, or a process to operate in a normal and usual manner; and could not have been prevented through careful planning, proper design, or better operation and maintenance practices; did not stem from any activity or event that could have been foreseen and avoided, or planned for; and were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; (40 CFR 63.480(j)(4)((i)(A))
- (b) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Offshift and overtime labor were used, to the extent practicable to make these repairs; (40 CFR 63.480(j)(4)((i)(B))
- (c) The frequency, amount, and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; (40 CFR 63.480(j)(4)(i)(C))
- (d) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; (40 CFR 63.480(j)(4)(i)(D))
- (e) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment, and human health; (40 CFR 63.480(j)(4)(i)(E))
- (f) All emissions monitoring and control systems were kept in operation, if at all possible, consistent with safety and good air pollution control practices; (40 CFR 63.480(j)(4)(i)(F))
- (g) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; (40 CFR 63.480(j)(4)(i)(G))
- (h) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and (40 CFR 63.480(j)(4)(i)(H))
- (i) The owner or operator has prepared a written root cause analysis, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using the best

monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction. (40 CFR 63.480(j)(4)(i)(I))

(4) At all times, each owner or operator must operate and maintain any affected source subject to the requirements of 40 CFR Part 63 Subpart U, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.483(a))

#### S2. Monitoring and Record Keeping (Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2)

Unless otherwise specified in 40 CFR Part 63 Subpart U, the owner or operator of an affected source shall keep copies of all applicable records required by this subpart for at least 5 years, as specified in 40 CFR 63.506(a)(1). (40 CFR 63.506(a))

All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provide access within 2 hours after a request. The remaining 4 and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on microfilm, computer, floppy disk, magnetic tape, or microfiche. (40 CFR 63.506(a)(1))

#### a. HAP (Non-LDAR 40 CFR Part 63 Subpart U)

- i. For E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, E-TKF-TK-109, E-TKF-TK-401, E-TKF-TK-402, E-TKF-TK-403, E-TKF-TK-404, E-TKF-TK-405, E-TKF-TK-406, E-TKF-TK-407, E-TKF-TK-408, E-TKF-TK-409, E-TKF-TK-410, E-TKF-TK-411, E-TKF-TK-412, E-PLY-TK-307N, E-PLY-TK-304, E-PLY-TK-305 and E-PLY-TK-306:
  - (1) For each Group 2 Storage Vessel E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108 and E-TKF-TK-109 (when each is storing organic HAP-containing raw materials predominantly associated with NBR production), and for E-TKF-TK-401, E-TKF-TK-402, E-TKF-TK-403, E-TKF-TK-404, E-TKF-TK-405, E-TKF-TK-406, E-TKF-TK-407, E-TKF-TK-408, E-TKF-TK-410 and E-TKF-TK-412:

The owner or operator shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 2 status and is in operation. (40 CFR 63.119(a)(3) and 40 CFR 63.123(a) as referenced by 40 CFR 63.484(a), with the differences noted in 40 CFR 63.484(c) through (s), as applicable)

(2) For E-TKF-TK-409, E-TKF-TK-411, E-PLY-TK-307N, E-PLY-TK-304, E-PLY-TK-305 and E-PLY-TK-306:

There are no applicable non-LDAR monitoring and recordkeeping requirements.

- ii. For Emission Points E-PLY-PLY-1, E-PLY-PLY-2, E-PLY-PLY-3, E-PLY-PLY-4, E-PLY-PLY-5, E-PLY-PLY-6, E-PLY-PLY-7, E-PLY-PLY-8, E-PLY-PLY-9, E-PLY-PLY-10, E-PLY-PLY-11, E-PLY-PLY-12, E-PLY-PLY-13, E-PLY-PLY-14, E-PLY-PLY-15, E-PLY-PLY-16, E-PLY-PLY-17, E-PLY-PLY-18, E-PLY-PLY-19, E-PLY-PLY-20, E-PLY-PLY-21, E-PLY-PLY-22, E-PLY-PLY-23, E-PLY-PLY-24, E-PLY-PLY-25, E-PLY-PLY-26, E-PLY-PLY-27, E-PLY-PLY-28, E-PLY-PLY-29, E-PLY-PLY-30, E-PLY-PLY-32, E-PLY-PLY-33, E-PLY-PLY-34, E-PLY-PLY-35, E-PLY-PLY-36, E-PLY-BDTTK-1, E-PLY-BDTTK-2, E-PLY-BDTTK-3, E-PLY-BDTTK-4, E-PLY-BDTTK-5, E-PLY-BDTTK-6, E-PLY-BDTTK-7, E-PLY-BDTTK-10, E-PLY-BDTTK-11, BDTTK-12, E-PLY-BDTTK-14, E-PLY-BDTTK-15, E-PLY-BDTTK-16, E-PLY-BDTTK-17 and E-PLY-BDTTK-18 which have each been determined to meet the criteria of a Group 2 Batch Front-End Process Vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions:
  - (1) Owners or operators of Group 2 batch front-end process vents are not required to establish a batch mass input limitation if the batch front-end process vent is Group 2 at the conditions specified in 40 CFR 63.487(h)(1) and (h)(2) and if the owner or operator complies with the recordkeeping provisions in 40 CFR 63.491(a)(1) through (3), 40 CFR 63.491(a)(9), and 40 CFR 63.491(a)(4) through (6) as applicable, and the reporting requirements in 40 CFR 63.492(a)(5) and (6) and (b). (40 CFR 63.487(h) as referenced by 40 CFR 63.487(g)(4)) (See Comment 3)
    - (a) Emissions for the single highest-HAP recipe (considering all products that are produced in the batch unit operation) are used in the group determination; and (40 CFR 63.487(h)(1))
    - (b) The group determination assumes that the batch unit operation is operating at the maximum design capacity of the EPPU for 12 months. (40 CFR 63.487(h)(2))
  - (2) Group determination records for batch front-end process vents: Each owner or operator of an affected source shall maintain the

following records for each batch front-end process vent subject to the group determination procedures of 40 CFR 63.488. Except for 40 CFR 63.491(a)(1), the records required to be maintained are limited to the information developed and used to make the group determination under 40 CFR 63.488(b) through 40 CFR 63.488(g), as appropriate. If an owner or operator did not need to develop certain information (*e.g.*, annual average batch vent flow rate) to determine the group status, 40 CFR 63.491(a) does not require that additional information be developed. 40 CFR 63.491(a)(9) specifies the recordkeeping requirements for Group 2 batch frontend process vents that are exempt from the batch mass input limitation provisions, as allowed under 40 CFR 63.487(h). (40 CFR 63.487(h) and 40 CFR 63.491(a)) (See Comment 3)

- (a) An identification of each unique product that has emissions from one or more batch emission episodes venting from the batch front-end process vent, along with an identification of the single highest-HAP recipe for each product and the mass of HAP fed to the reactor for that recipe. (40 CFR 63.487(h), 40 CFR 63.491(a)(8) and 40 CFR 63.491(a)(1))
- (b) A description of, and an emission estimate for, each batch emission episode, and the total emissions associated with one batch cycle, as described in either 40 CFR 63.491(a)(2)(i) or (a)(2)(ii), as appropriate. (40 CFR 63.487(h), 40 CFR 63.491(a)(8) and 40 CFR 63.491(a)(2))
  - (i) If the group determination is based on the expected mix of products, records shall include the emission estimates for the single highest-HAP recipe of each unique product identified in 40 CFR 63.491(a)(1) that was considered in making the group determination under 40 CFR 63.488. (40 CFR 63.487(h), 40 CFR 63.491(a)(8) and 40 CFR 63.491(a)(2)(i))
  - (ii) If the group determination is based on the single highest-HAP recipe (considering all products produced or processed in the batch unit operation), records shall include the emission estimates for the single highest-HAP recipe. (40 CFR 63.487(h), 40 CFR 63.491(a)(8) and 40 CFR 63.491(a)(2)(ii))
- (c) Total annual uncontrolled TOC or organic HAP emissions, determined at the exit from the batch unit operation before any emission control, as determined in accordance with 40 CFR 63.488(b). (40 CFR 63.487(h), 40 CFR 63.491(a)(8) and 40 CFR 63.491(a)(3))
  - (i) For Group 2 batch front-end process vents, emissions shall be determined at the batch mass input limitation. (40 CFR 63.487(h), 40 CFR

63.491(a)(8) and 40 CFR 63.491(a)(3)(i)) (See Comment 3)

- (d) For each Group 2 batch front-end process vent that is exempt from the batch mass input limitation provisions because it meets the criteria of 40 CFR 63.487(h), the records specified in 40 CFR 63.491(a)(9)(i) and (ii) shall be maintained. (40 CFR 63.487(h) and 40 CFR 63.491(a)(9)) (See Comment 3)
  - (i) Documentation of the maximum design capacity of the EPP; and (40 CFR 63.487(h) and 40 CFR 63.491(a)(9)(i))
  - (ii) The mass of HAP or material that can be charged annually to the batch unit operation at the maximum design capacity. (40 CFR 63.487(h) and 40 CFR 63.491(a)(9)(ii))
- (3) Process changes affecting Group 2 batch front-end process vents: Whenever process changes, as described in 40 CFR 63.488(i)(1) are made that affect one or more Group 2 batch front-end process vents and that could reasonably be expected to change one or more Group 2 batch front-end process vents to Group 1 batch front-end process vents or that could reasonably be expected to reduce the batch mass input limitation for one or more Group 2 batch front-end process vents, the owner or operator of the affected source shall comply with 40 CFR 63.488(i)(2) and (i)(3). (40 CFR 63.488(i)) (See Comment 3)
  - (a) Examples of process changes include the changes listed in 40 CFR 63.488(i)(1)(i), (i)(1)(ii), and (i)(1)(iii). (40 CFR 63.488(i)(1))
    - (i) For all batch front-end process vents, examples of process changes include, but are not limited to, changes in feedstock type or catalyst type; or whenever there is replacement, removal, or modification of recovery equipment considered part of the batch unit operation as specified in 40 CFR 63.488(a)(2); or increases in production capacity or production rate. For purposes of 40 CFR 63.488(i), process changes do not include: Process upsets; unintentional, temporary process changes; and changes that are within the margin of variation on which the original group determination was based. (40 CFR 63.488(i)(1)(i))
    - (ii) For Group 2 batch front-end process vents where the group determination and batch mass input limitation are based on the expected mix of products, the situations described in 40 CFR 63.488(i)(1)(ii)(A) and (B) shall be considered to be

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process changes. (40 CFR 63.488(i)(1)(ii)) (See Comment 3)

- A. The production of combinations of products not considered in establishing the batch mass input limitation. (40 CFR 63.488(i)(1)(ii)(A))
- B. The production of a recipe of a product with a total mass of HAP charged to the reactor during the production of a single batch of product that is higher than the total mass of HAP for the recipe used as the single highest-HAP recipe for that product in the batch mass input limitation determination. (40 CFR 63.488(i)(1)(ii)(B))
- (iii) For Group 2 batch front-end process vents where the group determination and batch mass input limitation are based on the single highest-HAP recipe (considering all products produced or processed in the batch unit operation), the production of a recipe having a total mass of HAP charged to the reactor (during the production of a single batch of product) that is higher than the total mass of HAP for the highest-HAP recipe used in the batch mass input limitation determination shall be considered to be a process change. (40 CFR 63.488(i)(1)(iii)) (See Comment 3)
- (b) For each batch front-end process vent affected by a process change, the owner or operator shall re-determine the group status by repeating the procedures specified in 40 CFR 63.488(b) through (g), as applicable. Alternatively, engineering assessment, as described in 40 CFR 63.488(b)(6)(i), may be used to determine the effects of the process change. (40 CFR 63.488(i)(2))
- (c) Based on the results of 40 CFR 63.488(i)(2), owners or operators of affected sources shall comply with either 40 CFR 63.488(i)(3)(i), (ii), or (iii). (40 CFR 63.488(i)(3))
  - (i) If the group redetermination described in 40 CFR 63.488(i)(2) indicates that a Group 2 batch frontend process vent has become a Group 1 batch frontend process vent as a result of the process change, the owner or operator of the affected source shall submit a report as specified in 40 CFR 63.492(b) and shall comply with the Group 1 provisions in 40 CFR 63.487 through 40 CFR 63.492 in accordance with 40 CFR 63.480(i)(2)(ii) or (i)(2)(iii), as applicable. (40 CFR 63.488(i)(3)(i))

If the redetermination described in 40 CFR (ii) 63.488(i)(2) indicates that a Group 2 batch frontend process vent with annual emissions less than the applicable level specified in 40 CFR 63.488(d), and that is in compliance with 40 CFR 63.487(g), now has annual emissions greater than or equal to the applicable level specified by 40 CFR 63.488(d) but remains a Group 2 batch front-end process vent, the owner or operator of the affected source shall with the provisions in 40 **CFR** 63.488(i)(3)(ii)(A) through (40 **CFR** (C). 63.488(i)(3)(ii))

- A. Re-determine the batch mass input limitation; (40 CFR 63.488(i)(3)(ii)(A)) (See Comment 3)
- B. Submit a report as specified in 40 CFR 63.492(c); and (40 CFR 63.488(i)(3)(ii)(B))
- C. Comply with 40 CFR 63.487(f), beginning with the year following the submittal of the report submitted according to 40 CFR 63.488(i)(3)(ii)(B). (40 CFR 63.488(i)(3)(ii)(C))
- (iii) If the group redetermination described in 40 CFR 63.488(i)(2) indicates no change in group status or no change in the relation of annual emissions to the levels specified in 40 CFR 63.488(d), the owner or operator of the affected source shall comply with 40 CFR 63.488(i)(3)(iii)(A) and (i)(3)(iii)(B). (40 CFR 63.488(i)(3)(iii)) (See Comment 3)
  - A. The owner or operator shall re-determine the batch mass input limitation; and (40 CFR 63.488(i)(3)(iii)(A))
  - B. The owner or operator shall submit the new batch mass input limitation in accordance with 40 CFR 63.492(c). (40 CFR 63.488(i)(3)(iii)(B))
- iii. For Emission Points E-PLY-BLTTK-20, E-PLY-BLTTK-21, E-PLY-BLTTK-22, E-PLY-BLTTK-23, E-PLY-BLTTK-24, E-PLY-BLTTK-25, E-PLY-BLTTK-26, E-PLY-BLTTK-31, E-PLY-BLTTK-32, E-PLY-BLTTK-33, E-PLY-BLTTK-34, E-PLY-BLTTK-35, E-PLY-BLTTK-36, E-PLY-BLTTK-37, E-PLY-BLTTK-38, E-PLY-BLTTK-39, E-PLY-NBLT, E-PLY-SBLT, E-PCO-TK-4, E-PCO-TK-5, E-PCO-TK-7, E-PCO-TK-8, E-PCO-TK-9, E-PCO-TK-11 (included with E-PCO-CN-1), E-PCO-CN-1, E-SDR-1BLT, E-SDR-1SD, E-DRY-PSTK-301, E-DRY-PSSCR-301A, E-DRY-PSTK-306, E-DRY-PSTK-302, E-DRY-PSSCR-302A, E-DRY-PSTK-303A, E-DRY-PSSCR-302B, E-DRY-PSTK-303B, E-DRY-PSTK-304B, E-DRY-PS

PSSCR-303, E-DRY-PSTK-304, E-DRY-PSSCR-304, E-DRY-PSPRS-300, and E-DRY-PSDR, **and for, when each is processing NBR,** Emission Points E-SDR-2BLT, E-SDR-EBLT, E-SDR-WBLT, E-SDR-2SD, E-SDR-2SDCYC (included with E-SDR-2SD), E-DRY-TK-202, E-DRY-TK-203, E-DRY-TK-204, E-DRY-NTK-15H, E-DRY-NSCR-1, E-DRY-NTK-16H, E-DRY-NTK-17H, E-DRY-NSCR-2, E-DRY-NTK-18H, E-DRY-NPRS-1, E-DRY-NGR-1H and E-DRY-NDR:

- (1) Compliance with the organic HAP emission limitation determined in accordance with 40 CFR 63.494(a)(4)(iv) shall be demonstrated in accordance with 40 CFR 63.495(g)(1) through 63.495(g)(5). (40 CFR 63.495(g))
  - (a) Calculate your organic HAP emission limitation in accordance with 40 CFR 63.494(a)(4)(i) through (iv), as applicable, record it, and submit it in accordance with 40 CFR 63.499(f)(1). (40 CFR 63.495(g)(1)) (See Comment 4)
  - (b) Each month, calculate and record the organic HAP emissions from all back-end process operations using engineering assessment. Engineering assessment includes, but is not limited to, the following: (40 CFR 63.495(g)(2))
    - (i) Previous test results, provided the test was representative of current operating practices. (40 CFR 63.495(g)(2)(i))
    - (ii) Bench-scale or pilot-scale test data obtained under conditions representative of current process operating conditions. (40 CFR 63.495(g)(2)(ii))
    - (iii) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to: (40 CFR 63.495(g)(2)(iii))
      - A. Use of material balances; (40 CFR 63.495(g)(2)(iii)(A))
      - B. Estimation of flow rate based on physical equipment design, such as pump or blower capacities; (40 CFR 63.495(g)(2)(iii)(B))
      - C. Estimation of organic HAP concentrations based on saturation conditions; and (40 CFR 63.495(g)(2)(iii)(C))
      - D. Estimation of organic HAP concentrations based on grab samples of the liquid or vapor. (40 CFR 63.495(g)(2)(iii)(D))
  - (c) Each month, record the mass of elastomer product produced. (40 CFR 63.495(g)(3))

(d) Each month, calculate and record the sums of the organic HAP emissions and the mass of elastomer produced for the previous calendar 12-month period. (40 CFR 63.495(g)(4))

- (e) Each month, divide the total mass of organic HAP emitted for the previous calendar 12-month period by the total mass of elastomer produced during this 12-month period. This value must be recorded in accordance with 40 CFR 63.498(e) and reported in accordance with 40 CFR 63.499(f)(2). (40 CFR 63.495(g)(5))
- (2) The owner or operator shall maintain the records specified below. (40 CFR 63.498(a))
  - (a) The type of elastomer product processed in the back-end operation. (40 CFR 63.498(a)(1))
  - (b) The type of process (solution process, emulsion process, etc.) (40 CFR 63.498(a)(2))
  - (c) If the back-end process operation is subject to an emission limitation in 40 CFR 63.494(a)(4), the organic HAP emission limitation calculated in accordance with 40 CFR 63.494(a)(4)(i) through (iv), as applicable. (40 CFR 63.498(a)(4) and (e)(1))
  - (d) The organic HAP emissions from all back-end process operations for each month, along with documentation of all calculations and other information used in the engineering assessment to estimate these emissions. (40 CFR 63.498(e)(2))
  - (e) The mass of elastomer product produced each month. (40 CFR 63.498(e)(3))
  - (f) The total mass of organic HAP emitted for each 12-month period divided by the total mass of elastomer produced during the 12-month period, determined in accordance with 40 CFR 63.495(g)(5). (40 CFR 63.498(e)(4))
- iv. For 40 CFR Part 63 Subpart U Process Wastewater (as defined in 40 CFR 63.482): (See Comment 5)
  - (1) For each Group 2 process wastewater stream, the owner or operator shall keep in a readily accessible location the records specified in 40 CFR 63.147(b)(8)(i) through (iv). (40 CFR 63.132(a)(3) and 40 CFR 63.147(b)(8) as referenced by 40 CFR 63.501(a) with the differences noted in 40 CFR 63.501(a)(1) through (a)(23) as appropriate)
    - (a) Process unit identification and description of the process unit. (40 CFR 63.132(a)(3) and 40 CFR 63.147(b)(8)(i) as referenced by 40 CFR 63.501(a) with the differences noted in 40 CFR 63.501(a)(1) through (a)(23) as appropriate)

(b) Stream identification code. (40 CFR 63.132(a)(3) and 40 CFR 63.147(b)(8)(ii) as referenced by 40 CFR 63.501(a) with the differences noted in 40 CFR 63.501(a)(1) through (a)(23) as appropriate)

- (c) For existing sources, concentration of compounds that meet the definition of organic HAP in 40 CFR 63.482 and that are listed in Table 9 of 40 CFR Part 63 Subpart G in parts per million, by weight. Include documentation of the methodology used to determine concentration. (40 CFR 63.132(a)(3) and 40 CFR 63.147(b)(8)(iii) as referenced by 40 CFR 63.501(a) with the differences noted in 40 CFR 63.501(a)(1) through (a)(23) as appropriate)
- (d) Flow rate in liter per minute. (40 CFR 63.132(a)(3) and 40 CFR 63.147(b)(8)(iv) as referenced by 40 CFR 63.501(a) with the differences noted in 40 CFR 63.501(a)(1) through (a)(23) as appropriate)
- (2) If the owner or operator uses process knowledge to determine the annual average concentration of a wastewater stream as specified in 40 CFR 63.144(b)(3) and/or uses process knowledge to determine the annual average flow rate as specified in 40 CFR 63.144(c)(1), and determines that the wastewater stream is not a Group 1 wastewater stream, the owner or operator shall keep in a readily accessible location the documentation of how process knowledge was used to determine the annual average concentration and/or the annual average flow rate of the wastewater stream. (40 CFR 63.147(f) as referenced by 40 CFR 63.501(a) with the differences noted in 40 CFR 63.501(a)(1) through (a)(23) as appropriate)
- v. *Malfunction records:* Each owner or operator of an affected source subject to 40 CFR Part 63 Subpart U shall maintain records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment), air pollution control equipment, or monitoring equipment. Each owner or operator shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.483(a)(1), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.506(b)(1)) (See Comment 6)
- vi. Changes or additions to plant sites: The provisions of 40 CFR 63.480 (i)(1) through (i)(4) apply to owners or operators that change or add to their plant site or affected source. 40 CFR 63.480(i)(5) provides examples of what are and are not considered process changes for purposes of 40 CFR 63.480(i). 40 CFR 63.480(i)(6) discusses reporting requirements. (40 CFR 63.480(i))
  - (1) Adding an EPPU to a plant site: The provisions of 40 CFR 63.480(i)(1)(i) and (i)(1)(ii) apply to owners or operators that add one or more EPPUs to a plant site. (40 CFR 63.480(i)(1))

(a) If a group of one or more EPPUs that produce the same primary product is added to a plant site, the added group of one or more EPPUs and associated equipment, as listed in 40 CFR 63.480(a)(4), shall be a new affected source and shall comply with the requirements for a new affected source in 40 CFR Part 63 Subpart U upon initial start-up or by June 19, 2000, whichever is later, if the added group of one or more EPPUs meets the criteria in either 40 CFR 63.480(i)(1)(i)(A) or (i)(1)(i)(B), and if the criteria in either 40 CFR 63.480(i)(1)(i)(C) or (i)(1)(i)(D) are met. (40 CFR 63.480(i)(1)(i))

- (i) The construction of the group of one or more EPPUs commenced after June 12, 1995. (40 CFR 63.480(i)(1)(i)(A))
- (ii) The construction or reconstruction, for process units that have become EPPUs, commenced after June 12, 1995. (40 CFR 63.480(i)(1)(i)(B))
- (iii) The group of one or more EPPUs and associated equipment, as listed in 40 CFR 63.480(a)(4), has the potential to emit 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAP, and the primary product of the group of one or more EPPUs is currently produced at the plant site as the primary product of an affected source; or (40 CFR 63.480(i)(1)(i)(C))
- (iv) The primary product of the group of one or more EPPUs is not currently produced at the plant site as the primary product of an affected source, and the plant site meets, or after the addition of the group of one or more EPPUs and associated equipment, as listed in 40 CFR 63.480(a)(4), will meet the definition of a major source. (40 CFR 63.480(i)(1)(i)(D))
- (b) If a group of one or more EPPUs that produce the same primary product is added to a plant site, and the group of one or more EPPUs does not meet the criteria specified in 40 CFR 63.480(i)(1)(i), and the plant site meets, or after the addition will meet, the definition of a major source, the group of one or more EPPUs and associated equipment, as listed in 40 CFR 63.480(a)(4), shall comply with the requirements for an existing affected source in 40 CFR Part 63 Subpart U upon initial start-up; by June 19, 2001; or by 6 months after notifying the Administrator that a process unit has been designated as an EPPU (in accordance with 40 CFR 63.480(f)(3)(iii)), whichever is later. (40 CFR 63.480(i)(1)(ii))

(2) Adding emission points or making process changes to existing affected sources: The provisions of 40 CFR 63.480(i)(2)(i) through (i)(2)(ii) apply to owners or operators that add emission points or make process changes to an existing affected source. (40 CFR 63.480(i)(2)) (See Comment 1)

- (a) If any components are replaced at an existing affected source such that the criteria specified in 40 CFR 63.480(i)(2)(i)(A) through (i)(2)(i)(B) are met, the entire affected source shall be a new affected source and shall comply with the requirements for a new affected source upon initial start-up or by June 19, 2000, whichever is later. (40 CFR 63.480(i)(2)(i))
  - (i) The replacement of components meets the definition of reconstruction in 40 CFR 63.482(b); and (40 CFR 63.480(i)(2)(i)(A))
  - (ii) Such reconstruction commenced after June 12, 1995. (40 CFR 63.480(i)(2)(i)(B))
- (b) If any components are replaced at an existing affected source such that the criteria specified in 40 CFR 63.480(i)(2)(i)(A) and (i)(2)(i)(B) are not met and that replacement of components creates one or more emission points (i.e., either newly created Group 1 emission points or emission points that change from Group 2 to Group 1) or causes any other emission point to be added (i.e., Group 2 emission points, back-end process operations subject to 40 CFR 63.493 and 40 CFR 63.500, and heat exchange systems and equipment leak components subject to 40 CFR 63.502), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance by 120 days after the date of initial start-up or by the appropriate compliance date specified in 40 CFR 63.481 (i.e., July 31, 1997 for most equipment leak components subject to 40 CFR 63.502, and June 19, 2001 for emission points other than equipment leaks), whichever is later. (40 CFR 63.480(i)(2)(ii))
- (c) If an addition or process change (not including a process change that solely replaces components) is made that creates one or more Group 1 emission points (*i.e.*, either newly created Group 1 emission points or emission points that change group status from Group 2 to Group 1) or causes any other emission point to be added (*i.e.*, Group 2 emission points, back-end process operations subject to 40 CFR 63.493 through 40 CFR 63.500, and heat exchange systems and equipment leak components subject to 40 CFR 63.502), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source.

The resulting emission point(s) shall be in compliance by 120 days after the date of initial start-up or by the appropriate compliance date specified in 40 CFR 63.481 (*i.e.*, July 31, 1997 for most equipment leak components subject to 40 CFR 63.502, and June 19, 2001 for emission points other than equipment leaks), whichever is later. (40 CFR 63.480(i)(2)(iii))

- (3) Existing affected source requirements for compressors that become subject to 40 CFR Part 63 Subpart H requirements: If a process change or the addition of an emission point causes a compressor to become subject to 40 CFR 63.164 under 40 CFR 63.480(i), the owner or operator shall be in compliance upon initial start-up or by the compliance date for that compressor, as specified in 40 CFR 63.481(d), whichever is later. (40 CFR 63.480(i)(4)) (See Comment 1)
- (4) Determining what are and are not process changes: For purposes of 40 CFR 63.480(i), examples of process changes include, but are not limited to, changes in feedstock type or process catalyst type, or whenever the replacement, removal, or addition of recovery equipment, or equipment changes that increase production capacity. For purposes of 40 CFR 63.480(i), process changes do not include: process upsets, unintentional temporary process changes, and changes that do not alter the equipment configuration and operating conditions. (40 CFR 63.480(i)(5))
- (5) Reporting requirements for owners or operators that change or add to their plant site or affected source: Owners or operators that change or add to their plant site or affected source, as discussed in 40 CFR 63.480(i)(1) and (i)(2), shall submit a report as specified in 40 CFR 63.506(e)(7)(v). (40 CFR 63.480(i)(6))

### S3. Reporting (Regulation 2.16, Section 4.1.9.3)

Unless otherwise specified in 40 CFR Part 63 Subpart U, the owner or operator of an affected source shall keep copies of all applicable reports required by this subpart for at least 5 years, with the exception listed in 40 CFR 63.506(a)(2). (40 CFR 63.506(a))

If an owner or operator submits copies of reports to the appropriate EPA Regional Office, the owner or operator is not required to maintain copies of reports. If the EPA Regional Office has waived the requirement of 40 CFR 63.10(a)(4)(ii) for submittal of copies of reports, the owner or operator is not required to maintain copies of those reports. (40 CFR 63.506(a)(2))

Duplicative reporting is not required. For example, information required to be submitted in the MACT Non-LDAR Periodic Report is not required to also be submitted in the Title V Semi-Annual Compliance Reports.

All reports required under 40 CFR Part 63 Subpart U shall be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. If acceptable to both the Administrator

and the owner or operator of a source, reports may be submitted on electronic media. (40 CFR 63.506(e)(2))

# a. HAP (Non-LDAR 40 CFR Part 63 Subpart U)

i. MACT Non-LDAR Periodic Report: (40 CFR 63.506(e)(6))

For existing sources, the owner or operator shall submit Periodic Reports as specified below.

- (1) Except as specified in 40 CFR 63.506(e)(6)(xi) and (e)(6)(xii), a report containing the information in 40 CFR 63.506(e)(6)(ii) or 40 CFR 63.506(e)(6)(iii) through (e)(6)(x), as appropriate, shall be submitted semiannually no later than 60 days after the end of each 6-month period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. (40 CFR 63.506(e)(6)(i)) (See Comment 7 and Comment 0)
- (2) If none of the compliance exceptions in 40 CFR 63.506(e)(6)(iii) through 63.506(e)(6)(ix) occurred during the 6-month period, the Periodic Report required by 40 CFR 63.506(e)(6)(i) shall be a statement that there were no compliance exceptions as described in 40 CFR 63.506(e)(6) for the 6-month period covered by that report and that none of the activities specified in 40 CFR 63.506(e)(6)(iii) through (e)(6)(ix) occurred during the 6-month period covered by that report. (40 CFR 63.506(e)(6)(ii))
- (3) For an owner or operator of an affected source complying with the provisions of 40 CFR 63.484 through 40 CFR 63.501 for any emission point, Periodic Reports shall include: (40 CFR 63.506(e)(6)(iii)) (See Comment 1 and Comment 8)
  - (a) All information specified in 40 CFR 63.492 for batch frontend process vents and aggregate batch vent streams. (40 CFR 63.506(e)(6)(iii)(A))
    - (i) Whenever a process change, as defined in 40 CFR 63.488(i)(1), is made that causes a Group 2 batch front-end process vent to become a Group 1 batch front-end process vent, the owner or operator shall notify the Administrator and submit a description of the process change within 180 days after the process change is made or with the next Periodic Report, whichever is later. The owner or operator of an affected source shall comply with the Group 1 batch front-end process vent provisions in 40 CFR 63.486 through 40 CFR 63.492 in accordance with 40 CFR 63.480(i)(2)(ii). (40 CFR 63.492(b) as referenced by 40 CFR 63.506(e)(6)(iii)(A))

Whenever a process change, as defined in 40 CFR (ii) 63.488(i)(1), is made that causes a Group 2 batch front-end process vent with annual emissions less than the level specified in 40 CFR 63.488(d) for which the owner or operator is required to comply with 40 CFR 63.487(g) to have annual emissions greater than or equal to the level specified in 40 CFR 63.488(d) but remains a Group 2 batch frontend process vent, or if a process change is made that requires the owner or operator to re-determine the batch mass input limitation as specified in 40 CFR 63.488(i)(3), the owner or operator shall submit a report within 180 days after the process change is made or with the next Periodic Report, whichever is later. The following information shall be submitted: (40 CFR 63.492(c) as referenced by 40 CFR 63.506(e)(6)(iii)(A)) (See Comment 3)

- A. A description of the process change; (40 CFR 63.492(c)(1) as referenced by 40 CFR 63.506(e)(6)(iii)(A))
- B. The batch mass input limitation determined in accordance with 40 CFR 63.487(f)(1). (40 CFR 63.492(c)(2) as referenced by 40 CFR 63.506(e)(6)(iii)(A))
- (iii) The owner or operator is not required to submit a report of a process change if one of the conditions specified in 40 CFR 63.492(d)(1) or (d)(2) is met. (40 CFR 63.492(d) as referenced by 40 CFR 63.506(e)(6)(iii)(A))
  - A. The change does not meet the description of a process change in 40 CFR 63.488(i). (40 CFR 63.492(d)(1) as referenced by 40 CFR 63.506(e)(6)(iii)(A))
  - B. The re-determined group status remains
    Group 2 for an individual batch front-end
    process vent with annual emissions greater
    than or equal to the level specified in 40
    CFR 63.488(d) and the batch mass input
    limitation does not decrease, or a Group 2
    batch front-end process vent with annual
    emissions less than the level specified in 40
    CFR 63.488(d) complying with 40 CFR
    63.487(g) continues to have emissions less
    than the level specified in 40 CFR 63.488(d)
    and the batch mass input limitation does not
    decrease. (40 CFR 63.492(d)(2) as

referenced by 40 CFR 63.506(e)(6)(iii)(A)) (See Comment 3)

- (b) All information specified in 40 CFR 63.499 for back-end process operations. (40 CFR 63.506(e)(6)(iii)(A))
  - (i) If the back-end process operation is subject to an organic HAP emission limitation in 40 CFR 63.494(a)(4), the owner and operator must submit the information specified in 40 CFR 63.499(f)(1) and (2). (40 CFR 63.499(f) as referenced by 40 CFR 63.506(e)(6)(iii)(A) (See Comment 4)
    - A. The applicable organic HAP emission limitation determined in accordance with 40 CFR 63.494(a)(4)(i) through (iv), shall be submitted no later than 180 days from the date of publication of the final rule amendments in the Federal Register. (40 CFR 63.499(f)(1) as referenced by 40 CFR 63.506(e)(6)(iii)(A))
    - B. Beginning with the first periodic report required to be submitted by 40 CFR 63.506(e)(6) that is at least 13 months after the compliance date, the total mass of organic HAP emitted for each of the rolling 12-month periods in the reporting period divided by the total mass of elastomer produced during the corresponding 12-month period, determined in accordance with 40 CFR 63.495(g)(5). (40 CFR 63.499(f)(2) as referenced by 40 CFR 63.506(e)(6)(iii)(A))
- (c) The information in 40 CFR 63.506(e)(6)(iii)(D)(1) through 63.506(e)(6)(iii)(D)(5), as applicable: (40 CFR 63.506(e)(6)(iii)(D)) (See Comment 1)
  - (i) Notification if a process change is made such that the group status of any emission point changes from Group 2 to Group 1. The owner or operator is not required to submit a notification of a process change if that process change caused the group status of an emission point to change from Group 1 to Group 2. However, until the owner or operator notifies the Administrator that the group status of an emission point has changed from Group 1 to Group 2, the owner or operator is required to continue to comply with the Group 1 requirements for that emission point. This notification may be submitted at any time. (40 CFR 63.506(e)(6)(iii)(D)(2))

(ii) Notification if one or more emission points (other than equipment leaks) or one or more EPPU is added to an affected source. The owner or operator shall submit the information contained in 40 CFR 63.506(e)(6)(iii)(D)(3)(i) through (e)(6)(iii)(D)(3)(ii). (40 CFR 63.506(e)(6)(iii)(D)(3))

- A. A description of the addition to the affected source; and (40 CFR 63.506(e)(6) (iii)(D)(3)(i))
- B. Notification of the group status of the additional emission point or all emission points in the EPPU. (40 CFR 63.506(e)(6) (iii)(D)(3)(ii)
- (d) The number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.483(a)(1), including actions taken to correct a malfunction.(40 CFR 63.506(e)(6)(iii)(E))(See Comment 6)
- (4) Notification of a change in the primary product of an EPPU, in accordance with the provisions in 40 CFR 63.480(f). This includes a change in primary product from one elastomer product to either another elastomer product or to a non-elastomer product. (40 CFR 63.506(e)(6)(vi))
- (5) The results for each change made to a predominant use determination made under 40 CFR 63.480(g) for a storage vessel that is assigned to an affected source subject to 40 CFR Part 63 Subpart U after the change. (40 CFR 63.506(e)(6)(vii))
- ii. Reports of Start-Up, Shutdown, and Malfunction: (40 CFR 63.506(b)(1))

For the purposes of 40 CFR Part 63 Subpart U, the semiannual start-up, shutdown, and malfunction reports shall be submitted on the same schedule as the Periodic Reports required under 40 CFR 63.506(e)(6) instead of the schedule specified in 40 CFR 63.10(d)(5)(i). The reports shall include the information specified in 40 CFR 63.10(d)(5)(i). (40 CFR 63.506(b)(1)(ii)) (See Comment 6)

iii. Other MACT Reports: (40 CFR 63.506(e)(7))

Other reports shall be submitted as specified in 40 CFR 63.506(e)(7)(i) through 63.506(e)(7)(v). (40 CFR 63.506(e)(7))

(1) Owners or operators of EPPU or emission points (other than equipment leak components subject to 40 CFR 63.502) that are

subject to 40 CFR 63.480(i)(1) or (i)(2) shall submit a report as specified in 40 CFR 63.506(e)(7)(v)(A) and (B). (40 CFR 63.506(e)(7)(v)) (See Comment 1 and Comment 9)

- (a) Reports shall include: (40 CFR 63.506(e)(7)(v)(A))
  - (i) A description of the process change or addition, as appropriate; (40 CFR 63.506(e)(7)(v)(A)(1))
  - (ii) The planned start-up date and the appropriate compliance date, according to 40 CFR 63.480(i)(1) or (2); (40 CFR 63.506(e)(7)(v)(A)(2))
  - (iii) Identification of the group status of emission points (except equipment leak components subject to the requirements in 40 CFR 63.502) specified in 40 CFR 63.506(e)(7)(v)(A)(3)(i) through (iii), as applicable. (40 CFR 63.506(e)(7)(v)(A)(3)
    - A. All the emission points in the added EPPU, as described in 40 CFR 63.480(i)(1). (40 CFR 63.506(e)(7)(v)(A)(3)(i))
    - B. All the emission points in an affected source designated as a new affected source under 40 CFR 63.480(i)(2)(i). (40 CFR 63.506 (e)(7)(v)(A)(3)(ii))
    - C. All the added or created emission points as described in 40 CFR 63.480(i)(2)(ii) or (i)(2)(iii). (40 CFR 63.506(e)(7)(v)(A) (3)(iii))
  - (iv) If the owner or operator wishes to request approval to use alternative monitoring parameters, alternative continuous monitoring or recordkeeping, alternative controls, engineering assessment to estimate emissions from a batch emissions episode, or wishes to establish parameter monitoring levels according to the procedures contained in 40 CFR 63.505(c) or (d), a Precompliance Report shall be submitted in accordance with 40 CFR 63.506(e) (7)(v)(B). (40 CFR 63.506(e)(7)(v)(A)(4))
- (b) Reports shall be submitted as specified in 40 CFR 63.506(e)(7)(v)(B)(I) through (e)(7)(v)(B)(3), as appropriate. (40 CFR 63.506(e)(7)(v)(B))
  - (i) Owners or operators of an added EPPU subject to 40 CFR 63.480(i)(1) shall submit a report no later than 180 days prior to the compliance date for the EPPU. (40 CFR 63.506(e)(7)(v)(B)(1))
  - (ii) Owners or operators of an affected source designated as a new affected source under 40 CFR

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- 63.480(i)(2)(i) shall submit a report no later than 180 days prior to the compliance date for the affected source. (40 CFR 63.506(e)(7)(v)(B)(2))
- (iii) Owners and operators of any emission point (other than equipment leak components subject to 40 CFR 63.502) subject to 40 CFR 63.480(i)(2)(ii) or (i)(2)(iii) shall submit a report no later than 180 days prior to the compliance date for those emission points. (40 CFR 63.506(e)(7)(v)(B)(3))
- iv. Non-Violation of Reporting Requirements: (40 CFR 63.506(e)(1))
  - (1) Owners and operators shall not be in violation of the reporting requirements of 40 CFR Part 63 Subpart U for failing to submit information required to be included in a specified report if the owner or operator meets the requirements in 40 CFR 63.506(e)(1)(i) through (e)(1)(iii). Examples of circumstances where 40 CFR 63.506(e)(1) may apply include information related to newly-added equipment or emission points, changes in the process, changes in equipment required or utilized for compliance with the requirements of 40 CFR Part 63 Subpart U, or changes in methods or equipment for monitoring, recordkeeping, or reporting. (40 CFR 63.506(e)(1)) (See Comment 1)
    - (a) The information was not known in time for inclusion in the report specified by 40 CFR Part 63 Subpart U; (40 CFR 63.506(e)(1)(i))
    - (b) The owner or operator has been diligent in obtaining the information; and (40 CFR 63.506(e)(1)(ii))
    - (c) The owner or operator submits a report according to the provisions of 40 CFR 63.506(e)(1)(iii)(A) through (e)(1)(iii)(C). (40 CFR 63.1335(e)(1)(iii))
      - (i) If 40 CFR Part 63 Subpart U expressly provides for supplements to the report in which the information is required, the owner or operator shall submit the information as a supplement to that report. The information shall be submitted no later than 60 days after it is obtained, unless otherwise specified in 40 CFR Part 63 Subpart U. (40 CFR 63.506(e) (1)(iii)(A))
      - (ii) If 40 CFR Part 63 Subpart U does not expressly provide for supplements, but the owner or operator must submit a request for revision of an operating permit pursuant to 40 CFR Part 70 or Part 71, due to circumstances to which the information pertains, the owner or operator shall submit the information with the request for revision to the operating permit. (40 CFR 63.506(e)(1)(iii)(B))

(iii) In any case not addressed by 40 CFR 63.506(e) (1)(iii)(A) or (e)(1)(iii)(B), the owner or operator shall submit the information with the first Periodic Report, as required by 40 CFR Part 63 Subpart U, which has a submission deadline at least 60 days after the information is obtained. (40 CFR 63.506 (e)(1)(iii)(B))

#### v. Other MACT Notifications:

(1) Affirmative Defense Notification: The owner or operator of the facility experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Administrator by telephone or facsimile (FAX) transmission as soon as possible, but no later than 2 business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 45 days of the initial occurrence of the exceedance of the standard in 40 CFR Part 63 Subpart U to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in 40 CFR 63.480(j)(4)(i). The owner or operator may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Administrator before the expiration of the 45 day period. Until a request for an extension has been approved by the Administrator, the owner or operator is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance. (40 CFR 63.480(j)(4)(ii)) (See Comment 6)

## Appendix A Comments: 40 CFR Part 63 Subpart U

- 1. For the purposes of 40 CFR Part 63 Subpart U, *National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins* (also known as P&R I), Zeon is an **existing** Elastomer Product Process Unit (EPPU) affected source. Zeon has no Subpart U MACT-required control devices. As defined in 40 CFR 63.482, a Subpart U MACT *emission point* means an individual continuous front-end process vent, batch front-end process vent, back-end process vent, storage vessel, waste management unit, heat exchange system, or equipment leak, or equipment subject to 40 CFR 63.149. A Subpart U MACT emission point is not necessarily the same as a Title V Emission Point, and vice versa. Note, the convention used in this Permit is for *emission point* (all lower case letters) to reference a MACT emission point, and for *Emission Point* to reference a Title V Emission Point.
- 2. Zeon has no 40 CFR Part 63 Subpart U associated system meeting the definition of Heat Exchange System in 40 CFR 63.101 as referenced by 40 CFR 63.482. Zeon is therefore not subject to the 40 CFR Part 63 Subpart U Heat Exchange System provisions of 40 CFR 63.104 as referenced by 40 CFR 63.502(n) with the exceptions noted in 40 CFR 63.502(n)(1) through (n)(5). (See Zeon's July 9, 2002 Supplement No. 1 to the November 16, 2001 NOCS required by 40 CFR Part 63 Subparts U and JJJ.)
- 3. Each of Zeon's batch front-end process vents is a Group 2 batch front-end process vent with annual emissions of organic HAP less than the level specified in 40 CFR 63.488(d) (11,800 kg/yr, or 26,019 lbs/yr), and each is exempt from the batch mass input limit provisions of 40 CFR 63.487(g) by 40 CFR 63.487(g)(4) because each meets the criteria of 40 CFR 63.487(h), and a batch mass input limitation is therefore not required to be established.
- 4. Zeon submitted the 40 CFR 63.499(f)(1) notification required by the April 21, 2011 Final Rule Amendments to 40 CFR Part 63 Subpart U on October 18, 2011 regarding the applicable back-end process organic HAP emission limitation for its NBR production. In the October 18, 2011 calculation, an incorrect production figure for 2009 was inadvertently used. Zeon submitted on March 15, 2013 the corrected HAP emission limitation with additional supporting information. The updated HAP emission limitation is incorporated into this permit. Zeon's determination of this limitation was made in accordance with 40 CFR 63.494(a)(4)(iv), and the resultant back-end process organic HAP limitation was calculated to be 0.000315 Mg organic HAP emissions per Mg NBR produced. (Alternative English units of 0.630 lb HAP/Ton NBR production) Per 40 CFR 63.481(c)(1), existing affected sources producing NBR shall be in compliance with the applicable emission limitation in 40 CFR 63.494(a)(4)(iv) no later than April 23, 2012. Reporting in accordance with 40 CFR 63.499(f)(2) began with the Periodic Report due on July 14, 2013 for the time period of November 16, 2012 through May 15, 2013.
- 5. Zeon has no maintenance water streams that are classified as maintenance wastewater as defined in 40 CFR 63.482 for the purposes of 40 CFR Part 63 Subpart U. Zeon is therefore not subject to the requirements of 40 CFR 63.105 as referenced by 40 CFR 63.501(b).

6. Per 40 CFR 63.506(b)(1) and Table 1 to Subpart U of 40 CFR Part 63, records and reports of start-up, shutdown, and malfunction are not required for Zeon because Zeon has only Group 2 Subpart U emission points that are not included in an emissions average.

- 7. The non-LDAR Notification of Compliance Status (NOCS) for 40 CFR Part 63 Subpart U was submitted by Zeon on November 16, 2001 in accordance with 40 CFR 63.506(e)(5).
- 8. Non-Applicable Non-LDAR Periodic Report Requirements. The following 40 CFR Part 63 Subpart U Periodic Report requirements of 40 CFR 63.506(e)(6)(iii) are not applicable to Zeon (non-applicability basis): (A) information specified in 40 CFR 63.122(a)(4) for storage vessels (Zeon has no Group 1 storage vessels); 40 CFR 63.117(a)(3) and 40 CFR 63.118(f) and 40 CFR 63.485(s)(5) for continuous front-end process vents (Zeon has no continuous front-end process vents); 63.104(f)(2) for heat exchange systems (See Comment 2); 40 CFR 63.146(c) through 63.146(g) for process wastewater (Zeon has no Group 1 wastewater, no Subpart U MACT-required control devices and no required monitoring); (B) daily average values of monitored parameters for all excursions (Zeon has no required parametric monitoring under Subpart U); (C) [Reserved]; (D)(1) supplements to the Emissions Averaging Plan (Zeon does not participate in an Emissions Averaging Plan); (D)(4) notification if change to a standard operating procedure has potential to increase concentration of carbon disulfide in exhaust emissions (Zeon's EPPU does not involve carbon disulfide emissions); and (D)(5) process wastewater streams sent for treatment (Zeon has no Group 1 wastewater). In addition, also nonapplicable are 40 CFR 63.506(e)(6)(iv) (All batch front-end process vents are exempt from batch mass input limitation provisions; See Comment 3); 40 CFR 63.506(e)(6)(v) performance tests (No performance tests are required of Zeon under Subpart U); 40 CFR 63.506(e)(6)(viii) changes to predominant use determination for recovery operations (Zeon has no recovery operations subject to Subpart U requirements); 40 CFR 63.506(e)(6)(ix) and (x) reduced recordkeeping program as alternative to continuous operating parameter monitoring and recordkeeping provisions (Zeon is not required by Subpart U to perform continuous operating parameter monitoring); 40 CFR 63.506(e)(6)(xi) quarterly reporting for emission points in an emissions average (Zeon does not participate in emissions averaging); and 40 CFR 63.506(e)(6)(xii) quarterly reporting for having control or recovery device and associated excursions (Zeon is not required to perform any type of parametric monitoring under Subpart U).
- 9. Non-Applicable "Other Report" Requirements. The following 40 CFR Part 63 Subpart U Other Report requirements of 40 CFR 63.506(e)(7) are not applicable to Zeon (non-applicability basis): 40 CFR 63.506(e)(7)(i) storage vessel inspections (Zeon has no Group 1 storage vessels); 40 CFR 63.506(e)(7)(ii) for emissions average credits calculation (Zeon does not participate in emissions averaging); 40 CFR 63.506(e)(7)(iii) for back-end process operations using a control or recovery device (Zeon has no Subpart U-required control or recovery device); and 40 CFR 63.506(e)(7)(iv) for flexible operation units and termination of all elastomer products (Zeon has no flexible operation units and does not anticipate terminating production of all elastomer products).

10. MACT Non-LDAR Periodic Report Submittal Dates

Report Description: 1<sup>st</sup> Subparts U/JJJ Non-LDAR Periodic Report (Semiannual)

1st Semiannual Non-LDAR

Report Period: November 16 through May 15

Report Due Date: July 14

Report Description: 2<sup>nd</sup> Subparts U/JJJ Non-LDAR Periodic Report (Semiannual)

2<sup>nd</sup> Semiannual Non-LDAR

Report Period: May 16 through November 15

Report Due Date: January 14

11. The following table outlines what HAP-containing raw material is predominantly associated with each MACT standard applicable to Emission Points listed in Emission Unit U-ZN.

MACT Standard	HAP-Containing Raw Material Monomer(s) Predominantly Associated with MACT Standard for MACT Assignment Purposes
40 CFR Part 63 Subpart U	Acrylonitrile and 1,3-Butadiene
40 CFR Part 63 Subpart JJJ	Styrene
40 CFR Part 63 Subpart FFFF	Ethyl Acrylate

# Appendix B: 40 CFR Part 63 Subpart JJJ

- S1. Standards (Regulation 2.16, Section 4.1.1)
  - a. HAP (Non-LDAR 40 CFR Part 63 Subpart JJJ) (See Comment 1 and Comment 2)
    - i. For Emission Points E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108 and E-TKF-TK-109 defined as Storage Vessels per 40 CFR 63.1312:
      - (1) When each storage vessel is storing material predominantly associated with styrene acrylonitrile (SAN) production that contains no organic HAP, or organic HAP as impurities only, each is not subject to the requirements of 40 CFR Part 63 Subpart JJJ or to the provisions of 40 CFR Part 63 Subpart A. (40 CFR 63.1310(c)(8) and 40 CFR 63.1312 (Definition of Storage Vessel))
      - (2) When each of Storage Vessels E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108 and E-TKF-TK-109 is storing organic HAP-containing raw materials predominantly associated with SAN production:

There are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart JJJ. (40 CFR 63.1314(d)) (See Comment 1 and Comment 3)

- ii. For Group 2 Batch process vents as specified in 40 CFR 63.1323(b) at the location specified in 40 CFR 63.1323(a)(2):
  - (1) For Emission Point E-PLY-PLY-31, a Group 2 Batch Process Vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions:
    - There are no applicable non-LDAR standards under 40 CFR Part 63 Subpart JJJ. (40 CFR 63.1323(d), 40 CFR 63.1322(g) and 40 CFR 63.1322(h)) (See Comment 4)
  - (2) For Emission Points E-SDR-2BLT, E-SDR-EBLT and E-SDR-WBLT, when processing SAN, each of which is a Group 2 Batch Process Vent with annual emissions of organic HAP less than 11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions:
    - There are no applicable non-LDAR standards under 40 CFR Part 63 Subpart JJJ. (40 CFR 63.1323(d), 40 CFR 63.1322(g) and 40 CFR 63.1322(h)) (See Comment 4)
  - (3) For Emission Point E-SDR-2SD, which includes E-SDR-2SDCYC, when processing SAN, a Group 2 Batch Process Vent with annual emissions of organic HAP greater than or equal to

11,800 kg/yr (26,019 lbs/yr) exempt from the batch mass input limitation provisions:

There are no applicable non-LDAR standards under 40 CFR Part 63 Subpart JJJ. (40 CFR 63.1323(g), 40 CFR 63.1322(f) and 40 CFR 63.1322(h)) (See Comment 4 and Comment 5)

iii. For 40 CFR Part 63 Subpart JJJ Process Wastewater (as defined in 40 CFR 63.1312): (See Comment 6)

All 40 CFR Part 63 Subpart JJJ process wastewater streams have been determined to be Group 2 process wastewater. There are no applicable non-LDAR standards for Group 2 process wastewater. (40 CFR 63.132(a)(3) as referenced by 40 CFR 63.1330(b) with the differences noted in 40 CFR 63.1330(b)(1) through (b)(22))

- iv. The below items shall be followed during periods of start-up, shutdown, malfunction, or non-operation of the affected source or any part thereof: (40 CFR 63.1310(j)) (See Comment 7)
  - (1) The emission limitations set forth in 40 CFR Part 63 Subpart JJJ and the emission limitations referred to in 40 CFR Part 63 Subpart JJJ shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which 40 CFR Part 63 Subpart JJJ applies. The emission limitations of 40 CFR Part 63 Subpart JJJ and the emission limitations referred to in 40 CFR Part 63 Subpart JJJ shall not apply during periods of start-up, shutdown, or malfunction, except as provided in 40 CFR 63.1310(j)(3) and (j)(4). However, if a start-up, shutdown, malfunction, or period of non-operation of one portion of an affected source does not affect the ability of a particular emission point to comply with the emission limitations to which it is subject, then that emission point shall still be required to comply with the applicable emission limitations of 40 CFR Part 63 Subpart JJJ during the start-up, shutdown, malfunction, or period of non-operation. For example, if there is an overpressure in the reactor area, a storage vessel that is part of the affected source would still be required to be controlled in accordance with the emission limitations in 40 CFR 63.1314. Similarly, the degassing of a storage vessel would not affect the ability of a batch process vent to meet the emission limitations of 40 CFR 63.1321 through 40 CFR 63.1327. (40 CFR 63.1310(j)(1)) (See Comment 1)
  - (2) The owner or operator shall not shut down items of equipment that are required or utilized for compliance with 40 CFR Part 63 Subpart JJJ during periods of start-up, shutdown, or malfunction during times when emissions (or, where applicable, wastewater streams or residuals) are being routed to such items of equipment, if the shutdown would contravene requirements of 40 CFR Part 63 Subpart JJJ applicable to such items of equipment. (40 CFR 63.1310(j)(3))

40 CFR 63.1310(j)(3) does not apply if the item of equipment is malfunctioning. 40 CFR 63.1310(j)(3) also does not apply if the owner or operator shuts down the compliance equipment (other than monitoring systems) to avoid damage due to a contemporaneous start-up, shutdown, or malfunction of the affected source or portion thereof. If the owner or operator has reason to believe that monitoring equipment would be damaged due to a contemporaneous start-up, shutdown, or malfunction of the affected source or portion thereof, the owner or operator shall provide documentation supporting such a claim in Precompliance Report or in a supplement to the Precompliance Report, as provided in 40 CFR 63.1335(e)(3). Once approved by the Administrator in accordance with 40 CFR 63.1335(e)(3)(viii), the provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required by the provisions of 40 CFR Part 63 Subpart JJJ must be incorporated into the start-up, shutdown, malfunction plan for that affected source, as stated in 40 63.1335(b)(1). (40 CFR 63.1310(j)(3))

(3) During start-ups, shutdowns, and malfunctions when the emission limitations of 40 CFR Part 63 Subpart JJJ do not apply pursuant to 40 CFR 63.1310(j)(1) through (j)(3), the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical. For purposes of 40 CFR 63.1310(j)(4), the term "excess emissions" means emissions greater than those allowed by the emissions limitation which would apply during operational periods other than start-up, shutdown, and malfunction. The measures to be taken shall be identified in the applicable start-up, shutdown, and malfunction plan, and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the affected source. Back-up control devices are not required, but may be used if available. (40 CFR 63.1310(j)(4))

# S2. Monitoring and Record Keeping (Regulation 2.16 Section 4.1.9.1 and 4.1.9.2)

Unless otherwise specified in 40 CFR Part 63 Subpart JJJ, the owner or operator of an affected source shall keep copies of all applicable records required by this subpart for at least 5 years, as specified in 40 CFR 63.1335(a)(1). (40 CFR 63.1335(a))

All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provide access within 2 hours after a request. The remaining 4 and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche. (40 CFR 63.1335(a)(1))

The owner or operator shall make the records readily available to the District upon request.

### a. HAP (Non-LDAR 40 CFR Part 63 Subpart JJJ)

i. For E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, E-TKF-TK-109, when each is storing organic HAP-containing raw materials predominantly associated with SAN production:

There are no applicable non-LDAR monitoring and recordkeeping requirements. (40 CFR 63.1314(d)) (See Comment 3)

- ii. For E-PLY-PLY-31, and for, when each is processing SAN, E-SDR-2BLT, E-SDR-EBLT, E-SDR-WBLT, and E-SDR-2SD, which includes E-SDR-2SDCYC: (See Comment 4)
  - (1) For all Batch Process Vents:

Owners or operators of Group 2 batch process vents are not required to establish a batch mass input limitation if the batch process vent is Group 2 at the conditions specified in 40 CFR 63.1322(h)(1) and (h)(2) and if the owner or operator complies with the recordkeeping provisions in 40 CFR 63.1326(a)(1) through (3), 40 CFR 63.1326(a)(9), and 40 CFR 63.1326(a)(4) through (6) as applicable, and the reporting requirements in 40 CFR 63.1327(a)(5) and (a)(6) and (b). (40 CFR 63.1322(h) as referenced by 40 CFR 63.1322(g)(4) or 40 CFR 63.1322(f))

- (a) Emissions for the single highest-HAP recipe (considering all products that are produced in the batch unit operation) are used in the group determination; and (40 CFR 63.1322 (h)(1))
- (b) The group determination assumes that the batch unit operation is operating at the maximum design capacity of the TPPU for 12 months. (40 CFR 63.1322(h)(2))
- (2) Group determination records for batch process vents: Each owner or operator of an affected source shall maintain the following records for each batch process vent subject to the group determination procedures of 40 CFR 63.1323. Except for 40 CFR 63.1326(a)(1), the records required are restricted to the information developed and used to make the group determination under 40 CFR 63.1323(b) through 40 CFR 63.1323(g), as appropriate. If an owner or operator did not need to develop certain information (e.g., annual average batch vent flow rate) to determine the group status, 40 CFR 63.1326(a) does not require that additional information be developed. 40 CFR 63.1326(a)(9) specifies the recordkeeping requirements for Group 2 batch process vents that are exempt from the batch mass input limitation provisions, as allowed under 40 CFR 63.1322(h). (40 CFR 63.1322(h) and 40 CFR 63.1326(a))
  - (a) For all Batch Process Vents: An identification of each unique product that has emissions from one or more batch emission episodes venting from the batch process vent,

along with an identification of the single highest-HAP recipe for each product and the mass of HAP fed to the reactor for that recipe. (40 CFR 63.1322(h), 40 CFR 63.1326(a)(8), as applicable, and 40 CFR 63.1326(a)(1))

- (b) For all Batch Process Vents: A description of, and an emission estimate for, each batch emission episode, and the total emissions associated with one batch cycle, as described in either 40 CFR 63.1326(a)(2)(i) or (a)(2)(ii), as appropriate. (40 CFR 63.1322(h), 40 CFR 63.1326(a)(8), as applicable, and 40 CFR 63.1326(a)(2))
  - (i) If the group determination is based on the expected mix of products, records shall include the emission estimates for the single highest-HAP recipe of each unique product identified in 40 CFR 63.1326(a)(1) that was considered in making the group determination under 40 CFR 63.1323. (40 CFR 63.1322(h), 40 CFR 63.1326(a)(8), as applicable, and 40 CFR 63.1326(a)(2)(i))
  - (ii) If the group determination is based on the single highest-HAP recipe (considering all products produced or processed in the batch unit operation), records shall include the emission estimates for the single highest-HAP recipe. (40 CFR 63.1322(h), 40 CFR 63.1326(a)(8), as applicable, and 40 CFR 63.1326(a)(2)(ii))
- (c) For all Batch Process Vents:
  - (i) Total annual uncontrolled TOC or organic HAP emissions, determined at the exit from the batch unit operation before any emission control, determined in accordance with 40 CFR 63.1323(b). (40 CFR 63.1322(h), 40 CFR 63.1326(a)(8), as applicable, and 40 CFR 63.1326(a)(3))
  - (ii) For Group 2 batch process vents, said emissions shall be determined at the batch mass input limitation. (40 CFR 63.1322(h), 40 CFR 63.1326(a)(8), as applicable, and 40 CFR 63.1326(a)(3)(i))
- (d) For Batch Process Vent E-SDR-2SD, which includes E-SDR-2SDCYC, only (when processing SAN):
  - The annual average batch vent flow rate for the batch process vent, determined in accordance with 40 CFR 63.1323(e). (40 CFR 63.1322(h), 40 CFR 63.1326(a)(8), as applicable, and 40 CFR 63.1326(a)(4)) (See Comment 5)
- (e) For Batch Process Vent E-SDR-2SD, which includes E-SDR-2SDCYC, only (when processing SAN):

The cutoff flow rate, determined in accordance with 40 CFR 63.1323(f). (40 CFR 63.1322(h), 40 CFR 63.1326(a)(8), as applicable, and 40 CFR 63.1326(a)(5)) (See Comment 5)

(f) For Batch Process Vent E-SDR-2SD, which includes E-SDR-2SDCYC, only (when processing SAN):

The results of the batch process vent group determination, conducted in accordance with 40 CFR 63.1323(g). (40 CFR 63.1322(h), 40 CFR 63.1326(a)(8), as applicable, and 40 CFR 63.1326(a)(6)) (See Comment 5)

- (g) For all Batch Process Vents: For each Group 2 batch process vent that is exempt from the batch mass input limitation provisions because it meets the criteria of 40 CFR 63.1322(h), the records specified in 40 CFR 63.1326(a)(9)(i) and (ii) shall be maintained. (40 CFR 63.1322(h) and 40 CFR 63.1326(a)(9))
  - (i) Documentation of the maximum design capacity of the TPPU; and (40 CFR 63.1322(h) and 40 CFR 63.1326(a)(9)(i))
  - (ii) The mass of HAP or material that can be charged annually to the batch unit operation at the maximum design capacity. (40 CFR 63.1322(h) and 40 CFR 63.1326(a)(9)(ii))
- (3) Process changes affecting Group 2 batch process vents:

#### For all Batch Process Vents:

- (a) Whenever process changes, as described in 40 CFR 63.1323(i)(1) are made that affect one or more Group 2 batch process vents and that could reasonably be expected to change one or more Group 2 batch process vents to Group 1 batch process vents or that could reasonably be expected to reduce the batch mass input limitation for one or more Group 2 batch process vents, the owner or operator of the affected source shall comply with 40 CFR 63.1323(i)(2) and (i)(3). (40 CFR 63.1323(i))
- (b) Examples of process changes include the changes listed in 40 CFR 63.1323(i)(1)(i), (i)(1)(ii), and (i)(1)(iii). (40 CFR 63.1323(i)(1))
  - (i) For all batch process vents, examples of process changes include, but are not limited to, changes in feedstock type or catalyst type; or whenever there is replacement, removal, or modification of recovery equipment considered part of the batch unit operation as specified in 40 CFR 63.1323(a)(2); or increases in production capacity or production rate.

For purposes of 40 CFR 63.1323(i), process changes do not include: Process upsets; unintentional, temporary process changes; and changes that are within the margin of variation on which the original group determination was based. (40 CFR 63.1323(i)(1)(i))

- (ii) For Group 2 batch process vents where the group determination and batch mass input limitation are based on the expected mix of products, the situations described in 40 CFR 63.1323(i)(1)(ii)(A) and (B) shall be considered to be process changes. (40 CFR 63.1323(i)(1)(ii))
  - A. The production of combinations of products not considered in establishing the batch mass input limitation. (40 CFR 63.1323(i)(1)(ii)(A))
  - B. The production of a recipe of a product with a total mass of HAP charged to the reactor during the production of a single batch of product that is higher than the total mass of HAP for the recipe used as the single highest-HAP recipe for that product in the batch mass input limitation determination. (40 CFR 63.1323(i)(1)(ii)(B))
- (iii) For Group 2 batch process vents where the group determination and batch mass input limitation are single highest-HAP based the recipe (considering all products produced or processed in the batch unit operation), the production of a recipe having a total mass of HAP charged to the reactor (during the production of a single batch of product) that is higher than the total mass of HAP for the highest-HAP recipe used in the batch mass input limitation determination shall be considered to be a process change. (40 CFR 63.1323(i)(1)(iii))
- (c) For each batch process vent affected by a process change, the owner or operator shall re-determine the group status by repeating the procedures specified in 40 CFR 63.1323(b) through (g), as applicable. Alternatively, engineering assessment, as described in 40 CFR 63.1323(b)(6)(i), may be used to determine the effects of the process change. (40 CFR 63.1323(i)(2))
- (d) Based on the results of 40 CFR 63.1323(i)(2), owners or operators of affected sources shall comply with either 40 CFR 63.1323(i)(3)(i), (ii), or (iii). (40 CFR 63.1323(i)(3))

(i) If the group redetermination described in 40 CFR 63.1323(i)(2) indicates that a Group 2 batch process vent has become a Group 1 batch process vent as a result of the process change, the owner or operator shall submit a report as specified in 40 CFR 63.1327(b) and shall comply with the Group 1 provisions in 40 CFR 63.1322 through 40 CFR 63.1327 in accordance with 40 CFR 63.1310(i)(2) (ii) or (i)(2)(iii), as applicable. (40 CFR 63.1323 (i)(3)(i))

- (ii) If the redetermination described in 40 CFR 63.1323(i)(2) indicates that a Group 2 batch process vent with annual emissions less than the applicable level specified in 40 CFR 63.1323(d), and that is in compliance with 40 CFR 63.1322(g), now has annual emissions greater than or equal to the applicable level specified in 40 CFR 63.1323(d) but remains a Group 2 batch process vent, the owner or operator shall comply with the provisions in 40 CFR 63.1323(i)(3)(ii)(A) through (C). (40 CFR 63.1323(i)(3)(ii))
  - A. Re-determine the batch mass input limitation; (40 CFR 63.1323(i)(3)(ii)(A))
  - B. Submit a report as specified in 40 CFR 63.1327(c); and (40 CFR 63.1323(i) (3)(ii)(B))
  - C. Comply with 40 CFR 63.1322(f), beginning with the year following the submittal of the report submitted according to 40 CFR 63.1323(i)(3)(ii)(B). (40 CFR 63.1323(i) (3)(ii)(C))
- (iii) If the group redetermination described in 40 CFR 63.1323(i)(2) indicates no change in group status or no change in the relation of annual emissions to the levels specified in 40 CFR 63.1323(d), the owner or operator of the affected source shall comply with 40 CFR 63.1323(i)(3)(iii)(A) and (i)(3)(iii)(B). (40 CFR 63.1323(i)(3)(iii))
  - A. The owner or operator shall re-determine the batch mass input limitation; and (40 CFR 63.1323(i)(3)(iii)(A))
  - B. The owner or operator shall submit the new batch mass input limitation in accordance with 40 CFR 63.1327(c). (40 CFR 63.1323 (i)(3)(iii)(B))

iii. For 40 CFR Part 63 Subpart JJJ Process Wastewater (as defined in 40 CFR 63.1312): (See Comment 6)

- (1) For each Group 2 process wastewater stream, the owner or operator shall keep in a readily accessible location the records specified in 40 CFR 63.147(b)(8)(i) through (iv). (40 CFR 63.132(a)(3) and 40 CFR 63.147(b)(8) as referenced by 40 CFR 63.1330(b) with the differences noted in 40 CFR 63.1330(b)(1) through (b)(22) as appropriate)
  - (a) Process unit identification and description of the process unit. (40 CFR 63.132(a)(3) and 40 CFR 63.147(b)(8)(i) as referenced by 40 CFR 63.1330(b) with the differences noted in 40 CFR 63.1330(b)(1) through (b)(22) as appropriate)
  - (b) Stream identification code. (40 CFR 63.132(a)(3) and 40 CFR 63.147(b)(8)(ii) as referenced by 40 CFR 63.1330(b) with the differences noted in 40 CFR 63.1330(b)(1) through (b)(22) as appropriate)
  - (c) For existing sources, concentration of compounds that meet the definition of organic HAP in 40 CFR 63.1312 and that are listed on Table 9 of 40 CFR Part 63 Subpart G. Include documentation of the methodology used to determine concentration. (40 CFR 63.132(a)(3) and 40 CFR 63.147(b)(8)(iii) as referenced by 40 CFR 63.1330(b) with the differences noted in 40 CFR 63.1330(b)(1) through (b)(22) as appropriate)
  - (d) Flow rate in liter per minute. (40 CFR 63.132(a)(3) and 40 CFR 63.147(b)(8)(iv) as referenced by 40 CFR 63.1330(b) with the differences noted in 40 CFR 63.1330(b)(1) through (b)(22) as appropriate)
- (2) If the owner or operator uses process knowledge to determine the annual average concentration of a wastewater stream as specified in 40 CFR 63.144(b)(3) and/or uses process knowledge to determine the annual average flow rate as specified in 40 CFR 63.144(c)(1), and determines that the wastewater stream is not a Group 1 wastewater stream, the owner or operator shall keep in a readily accessible location the documentation of how process knowledge was used to determine the annual average concentration and/or the annual average flow rate of the wastewater stream. (40 CFR 63.147(f) as referenced by 40 CFR 63.1330(b) with the differences noted in 40 CFR 63.1330(b)(1) through (b)(22) as appropriate)
- iv. Changes or additions to plant sites:

The provisions of 40 CFR 63.1310(i)(1) through (i)(4) apply to owners or operators that change or add to their plant site or affected source. 40 CFR 63.1310(i)(5) provides examples of what are and are not considered process

changes for purposes of 40 CFR 63.1310(i). 40 CFR 63.1310(i)(6) discusses reporting requirements. (40 CFR 63.1310(i))

- (1) Adding a TPPU to a plant site: The provisions of 40 CFR 63.1310(i)(1)(i) and (i)(1)(ii) apply to owners or operators that add one or more TPPUs to a plant site. (40 CFR 63.1310(i)(1))
  - (a) If a group of one or more TPPUs that produce the same primary product is added to a plant site, the added group of one or more TPPUs and associated equipment, as listed in 40 CFR 63.1310(a)(4), shall be a new affected source and shall comply with the requirements for a new affected source in 40 CFR Part 63 Subpart JJJ upon initial start-up or by June 19, 2000, whichever is later, if the added group of one or more TPPUs meets the criteria in either 40 CFR 63.1310(i)(1)(i)(A) or (i)(1)(i)(B), and if the criteria in either 40 CFR 63.1310(i)(1)(i)(C) or (i)(1)(i)(D) are met. (40 CFR 63.1310(i)(1)(i))
    - (i) The construction of the group of one or more TPPUs commenced after March 29, 1995. (40 CFR 63.1310(i)(1)(i)(A))
    - (ii) The construction or reconstruction, for process units that have become TPPUs, commenced after March 29, 1995. (40 CFR 63.1310(i)(1)(i)(B))
    - (iii) The group of one or more TPPUs and associated equipment, as listed in 40 CFR 63.1310(a)(4), has the potential to emit 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAP, and the primary product of the group of one or more TPPUs is currently produced at the plant site as the primary product of an affected source; or (40 CFR 63.1310(i)(1)(i)(C))
    - (iv) The primary product of the group of one or more TPPUs is not currently produced at the plant site as the primary product of an affected source, and the plant site meets, or after the addition of the group of one or more TPPUs and associated equipment, as listed in 40 CFR 63.1310(a)(4), will meet the definition of a major source. (40 CFR 63.1310 (i)(1)(i)(D))
  - (b) If a group of one or more TPPUs that produce the same primary product is added to a plant site, and the group of one or more TPPUs does not meet the criteria specified in 40 CFR 63.1310(i)(1)(i), and the plant site meets, or after the addition will meet, the definition of a major source, the group of one or more TPPUs and associated equipment, as listed in 40 CFR 63.1310(a)(4), shall comply with the requirements for an existing affected source in 40 CFR Part

63 Subpart JJJ upon initial start-up; by June 19, 2001; or by 6 months after notifying the Administrator that a process unit has been designated as a TPPU (in accordance with 40 CFR 63.1310(f)(3)(iii)), whichever is later. (40 CFR 63.1310(i)(1)(ii))

- (2) Adding emission points or making process changes to existing affected sources: The provisions of 40 CFR 63.1310(i)(2)(i) through (i)(2)(ii) apply to owners or operators that add emission points or make process changes to an existing affected source. (40 CFR 63.1310(i)(2)) (See Comment 1)
  - (a) If any components are replaced at an existing affected source such that the criteria specified in 40 CFR 63.1310(i)(2)(i)(A) through (i)(2)(i)(B) are met, the entire affected source shall be a new affected source and shall comply with the requirements for a new affected source upon initial start-up or by June 19, 2000, whichever is later. (40 CFR 63.1310(i)(2)(i))
    - (i) The replacement of components meets the definition of reconstruction in 40 CFR 63.1312(b); and (40 CFR 63.1310(i)(2)(i)(A))
    - (ii) Such reconstruction commenced after March 29, 1995. (40 CFR 63.1310(i)(2)(i)(B))
  - If any components are replaced at an existing affected (b) source such that the criteria specified in 40 CFR 63.1310(i)(2)(i)(A) through 63.1310(i)(2)(i)(B) are not met and that replacement of components creates one or more Group 1 emission points (i.e., either newly created Group 1 emission points or emission points that change from Group 2 to Group 1) or causes any other emission point to be added (i.e., Group 2 emission points, equipment leak components subject to 40 CFR 63.1331, continuous process vents subject to 40 CFR 63.1316 through 40 CFR 63.1320, and heat exchange systems subject to 40 CFR 63.1328), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance by 120 days after the date of initial start-up or by the appropriate compliance date specified in 40 CFR 63.1311 (i.e., February 27, 1998 for most equipment leak components subject to 40 CFR 63.1331, and June 19, 2001 for emission points other than equipment leaks), whichever is later. (40 CFR 63.1310(i)(2)(ii))
  - (c) If an addition or process change (not including a process change that solely replaces components) is made to an existing affected source that creates one or more Group 1 emission points (*i.e.*, either newly created Group 1

emission points or emission points that change group status from Group 2 to Group 1) or causes any other emission point to be added (*i.e.*, Group 2 emission points, equipment leak components subject to 40 CFR 63.1331, continuous process vents subject to 40 CFR 63.1316 through 40 CFR 63.1320, and heat exchange systems subject to 40 CFR 63.1328), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance by 120 days after the date of initial start-up or by the appropriate compliance date specified in 40 CFR 63.1311 (*i.e.*, February 27, 1998 for most equipment leak components subject to 40 CFR 63.1331, and June 19, 2001 for most emission points other than equipment leaks), whichever is later. (40 CFR 63.1310(i)(2)(iii))

- (3) Existing affected source requirements for compressors that become subject to the requirements of 40 CFR Part 63 Subpart H: If a process change or the addition of an emission point causes a compressor to become subject to 40 CFR 63.164 under 40 CFR 63.1310(i), the owner or operator shall be in compliance upon initial start-up or by the compliance date for that compressor, as specified in 40 CFR 63.1311(d)(1) through (d)(4), whichever is later. (40 CFR 63.1310(i)(4)) (See Comment 1)
- (4) Determining what are and are not process changes: For purposes of 40 CFR 63.1310(i), examples of process changes include, but are not limited to, changes in feedstock type or process catalyst type, or whenever the replacement, removal, or addition of recovery equipment, or equipment changes that increase production capacity. For purposes of 40 CFR 63.1310(i), process changes do not include: process upsets, unintentional temporary process changes, and changes that do not alter the equipment configuration and operating conditions. (40 CFR 63.1310(i)(5))
- (5) Reporting requirements for owners or operators that change or add to their plant site or affected source: Owners or operators that change or add to their plant site or affected source, as discussed in 40 CFR 63.1310(i)(1) and (i)(2), shall submit a report as specified in 40 CFR 63.1335(e)(7)(iv). (40 CFR 63.1310(i)(6))

### S3. Reporting (Regulation 2.16, Section 4.1.9.3)

Unless otherwise specified in 40 CFR Part 63 Subpart JJJ, the owner or operator of an affected source shall keep copies of all applicable reports required by this subpart for at least 5 years, with the exception listed in 40 CFR 63.1335(a)(2). (40 CFR 63.1335(a))

If an owner or operator submits copies of reports to the appropriate EPA Regional Office, the owner or operator is not required to maintain copies of reports. If the EPA Regional Office has waived the requirement of 40 CFR 63.10(a)(4)(ii) for submittal of copies of

reports, the owner or operator is not required to maintain copies of those reports. (40 CFR 63.1335(a)(2))

Duplicative reporting is not required. For example, information required to be submitted in the MACT Non-LDAR Periodic Report is not required to also be submitted in the Title V Semi-Annual Compliance Reports.

All reports required under 40 CFR Part 63 Subpart JJJ shall be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media. (40 CFR 63.1335(e)(2))

### a. HAP (Non-LDAR 40 CFR Part 63 Subpart JJJ)

i. MACT Non-LDAR Periodic Report: (40 CFR 63.1335(e)(6))

For existing sources, the owner or operator shall submit Periodic Reports as specified below.

- (1) Except as specified in 40 CFR 63.1335(e)(6)(xi) and (e)(6)(xii), a report containing the information in 40 CFR 63.1335(e)(6)(ii) or containing the information in 40 CFR 63.1335(e)(6)(iii) through (e)(6)(x), as appropriate, shall be submitted semiannually no later than 60 days after the end of each 6-month period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. (40 CFR 63.1335(e)(6)(i))(See Comment 8 and Comment 11)
- (2) If none of the compliance exceptions specified in 40 CFR 63.1335(e)(6)(iii) through (e)(6)(ix) occurred during the 6-month period, the Periodic Report required by 40 CFR 63.1335(e)(6)(i) shall be a statement that there were no compliance exceptions as described in 40 CFR 63.1335(e)(6) for the 6-month period covered by that report and no activities specified in 40 CFR 63.1335(e)(6)(iii) through (e)(6)(ix) occurred during the 6-month period covered by that report. (40 CFR 63.1335(e)(6)(ii))
- (3) For an owner or operator of an affected source complying with the provisions of 40 CFR 63.1314 through 40 CFR 63.1330 for any emission point or process Section, Periodic Reports shall include: (40 CFR 63.1335(e)(6)(iii)) (See Comment 1 and Comment 9)
  - (a) All information specified in 40 CFR 63.1327 for batch process vents and aggregate batch vent streams. (40 CFR 63.1335 (e)(6)(iii)(A))
    - (i) Whenever a process change, as defined in 40 CFR 63.1323(i)(1), is made that causes a Group 2 batch process vent to become a Group 1 batch process vent, the owner or operator shall notify the Administrator and submit a description of the process change within 180 days after the process

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change is made or with the next Periodic Report, whichever is later. The owner or operator of an affected source shall comply with the Group 1 batch process vent provisions in 40 CFR 63.1321 through 40 CFR 63.1327 in accordance with 40 CFR 63.1310(i)(2)(ii). (40 CFR 63.1327(b) as referenced by 40 CFR 63.1335(e)(6)(iii)(A))

- (ii) Whenever a process change, as defined in 40 CFR 63.1323(i)(1), is made that causes a Group 2 batch process vent with annual emissions less than the level specified in 40 CFR 63.1323(d) for which the owner or operator has chosen to comply with 40 CFR 63.1322(g) to have annual emissions greater than or equal to the level specified in 40 CFR 63.1323(d) but remains a Group 2 batch process vent, or if a process change is made that requires the owner or operator to re-determine the batch mass limitation as specified in 40 63.1323(i)(3), the owner or operator shall submit a report within 180 days after the process change is made or with the next Periodic Report, whichever is later. The following information shall be submitted: (40 CFR 63.1327(c) as referenced by 40 CFR 63.1335(e)(6)(iii)(A)) (See Comment 4)
  - A. A description of the process change; (40 CFR 63.1327(c)(1) as referenced by 40 CFR 63.1335(e)(6)(iii)(A))
  - B. The batch mass input limitation determined in accordance with 40 CFR 63.1322(f)(1). (40 CFR 63.1327(c)(2) as referenced by 40 CFR 63.1335(e)(6)(iii)(A))
- (iii) The owner or operator is not required to submit a report of a process change if one of the conditions specified in 40 CFR 63.1327(e)(1) or (e)(2) is met. (40 CFR 63.1327(e) as referenced by 40 CFR 63.1335(e)(6)(iii)(A))
  - A. The change does not meet the description of a process change in 40 CFR 63.1323(i) or (j). (40 CFR 63.1327(e)(1) as referenced by 40 CFR 63.1335(e)(6)(iii)(A))
  - B. The re-determined group status remains Group 2 for an individual batch process vent with annual emissions greater than or equal to the level specified in 40 CFR 63.1323(d) and the batch mass input limitation does not decrease, a Group 2 batch process vent with

annual emissions less than the level specified in 40 CFR 63.1323(d) complying with 40 CFR 63.1322(g) continues to have emissions less than the level specified in 40 CFR 63.1323(d) and the batch mass input limitation does not decrease, or the achieved emission reduction remains at 84% or greater for new SAN affected sources using a batch process. (40 CFR 63.1327(e)(2) as referenced by 40 CFR 63.1335(e)(6)(iii)(A)) (See Comment 4)

- (b) The information in 40 CFR 63.1335(e)(6)(iii)(D)(1) through (e)(6)(iii)(D)(4), as applicable: (40 CFR 63.1335(e)(6)(iii)(D))
  - (i) Notification if a process change is made such that the group status of any emission point changes from Group 2 to Group 1. The owner or operator is not required to submit a notification of a process change if that process change caused the group status of an emission point to change from Group 1 to Group 2. However, until the owner or operator notifies the Administrator that the group status of an emission point has changed from Group 1 to Group 2, the owner or operator is required to continue to comply with the Group 1 requirements for that emission point. This notification may be submitted at any time. (40 CFR 63.1335(e)(6)(iii)(D)(2))
  - (ii) Notification if one or more emission point(s) (other than equipment leaks) or one or more TPPU is added to an affected source. The owner or operator shall submit the information contained in 40 CFR 63.1335(e)(6)(iii)(D)(3)(i) through 40 CFR 63.1335(e)(6)(iii)(D)(3)(ii). (40 CFR 63.1335(e)(6) (iii)(D)(3))
    - A. A description of the addition to the affected source; and (40 CFR 63.1335(e)(6)(iii) (D)(3)(i))
    - B. Notification of the group status of the additional emission point or all emission points in the TPPU. (40 CFR 63.1335(e)(6) (iii)(D)(3)(ii))
- (4) Notification of a change in the primary product of a TPPU, in accordance with the provisions in 40 CFR 63.1310(f). This includes a change in primary product from one thermoplastic product to either another thermoplastic product or to a non-thermoplastic product. (40 CFR 63.1335(e)(6)(vi))

(5) The results for each change made to a predominant use determination made under 40 CFR 63.1310(g) for a storage vessel that is assigned to an affected source subject to 40 CFR Part 63 Subpart JJJ after the change. (40 CFR 63.1335(e)(6)(vii))

ii. Other MACT Reports: (40 CFR 63.1335(e)(7))

Other reports shall be submitted as specified in 40 CFR 63.1335(e)(7)(i) through (e)(7)(iv). (40 CFR 63.1335(e)(7))

- (1) Owners or operators of TPPU or emission points (other than equipment leak components subject to 40 CFR 63.1331) that are subject to 40 CFR 63.1310(i)(1) or (i)(2) shall submit a report as specified in 40 CFR 63.1335(e)(7)(iv)(A) and (B). (40 CFR 63.1335(e)(7)(iv)) (See Comment 1 and Comment 10)
  - (a) Reports shall include: (40 CFR 63.1335(e)(7)(iv)(A))
    - (i) A description of the process change or addition, as appropriate; (40 CFR 63.1335(e)(7)(iv)(A)(1))
    - (ii) The planned start-up date and the appropriate compliance date, according to 40 CFR 63.1310(i)(1) or (2); (40 CFR 63.1335(e)(7)(iv)(A)(2))
    - (iii) Identification of the group status of emission points (except equipment leak components subject to 40 CFR 63.1331) specified in 40 CFR 63.1335(e)(7) (iv)(A)(3)(i) through 40 CFR 63.1335(e)(7)(iv)(A) (3)(iii), as applicable. (40 CFR 63.1335(e)(7) (iv)(A)(3))
      - A. All the emission points in the added TPPU, as described in 40 CFR 63.1310(i)(1). (40 CFR 63.1335(e)(7)(iv)(A)(3)(i))
      - B. All the emission points in an affected source designated as a new affected source under 40 CFR 63.1310(i)(2)(i). (40 CFR 63.1335 (e)(7)(iv)(A)(3)(ii))
      - C. All the added or created emission points as described in 40 CFR 63.1310(i)(2)(ii) or (i)(2)(iii). (40 CFR 63.1335(e)(7)(iv) (A)(3)(iii))
    - (iv) If the owner or operator wishes to request approval to use alternative monitoring parameters, alternative continuous monitoring or recordkeeping, alternative controls, engineering assessment to estimate emissions from a batch emissions episode, or wishes to establish parameter monitoring levels according to the procedures contained in 40 CFR 63.1334(c) or (d), a Precompliance Report shall be

submitted in accordance with 40 CFR 63.1335(e) (7)(iv)(B). (40 CFR 63.1335(e)(7) (iv)(A)(4))

- (b) Reports shall be submitted as specified in 40 CFR 63.1335(e)(7)(iv)(B)(1) through (e)(7)(iv)(B)(3), as appropriate. (40 CFR 63.1335(e)(7)(iv)(B))
  - (i) Owners or operators of an added TPPU subject to 40 CFR 63.1310(i)(1) shall submit a report no later than 180 days prior to the compliance date for the TPPU. (40 CFR 63.1335(e)(7)(iv)(B)(1))
  - (ii) Owners or operators of an affected source designated as a new affected source under 40 CFR 63.1310(i)(2)(i) shall submit a report no later than 180 days prior to the compliance date for the affected source. (40 CFR 63.1335(e)(7)(iv)(B)(2))
  - (iii) Owners or operators of any emission point (other than equipment leak components subject to 40 CFR 63.1331) subject to 40 CFR 63.1310(i)(2)(ii) or (i)(2)(iii) shall submit a report no later than 180 days prior to the compliance date for those emission points. (40 CFR 63.1335(e)(7)(iv)(B)(3))
- (c) Non-Violation of Reporting Requirements: (40 CFR 63.1335(e)(1))

Owners and operators shall not be in violation of the reporting requirements of 40 CFR Part 63 Subpart JJJ for failing to submit information required to be included in a specified report if the owner or operator meets the requirements in 40 CFR 63.1335(e)(1)(i) through (e)(1)(iii). Examples of circumstances where 40 CFR 63.1335(e)(1) may apply include information related to newly-added equipment or emission points, changes in the process, changes in equipment required or utilized for compliance with the requirements of 40 CFR Part 63 Subpart JJJ, or changes in methods or equipment for monitoring, recordkeeping, or reporting. (40 CFR 63.1335(e)(1)) (See Comment 1)

- (i) The information was not known in time for inclusion in the report specified by 40 CFR Part 63 Subpart JJJ; (40 CFR 63.1335(e)(1)(i))
- (ii) The owner or operator has been diligent in obtaining the information; and (40 CFR 63.1335 (e)(1)(ii))
- (iii) The owner or operator submits a report according to the provisions of 40 CFR 63.1335(e)(1)(iii)(A) through 63.1335(e)(1)(iii)(C). (40 CFR 63.1335(e)(1)(iii))

A. If 40 CFR Part 63 Subpart JJJ expressly provides for supplements to the report in which the information is required, the owner or operator shall submit the information as a supplement to that report. The information shall be submitted no later than 60 days after it is obtained, unless otherwise specified in 40 CFR Part 63 Subpart JJJ. (40 CFR 63.1335(e)(1)(iii)(A))

- B. If 40 CFR Part 63 Subpart JJJ does not expressly provide for supplements, but the owner or operator must submit a request for revision of an operating permit pursuant to 40 CFR Part 70 or Part 71, due to circumstances to which the information pertains, the owner or operator shall submit the information with the request for revision to the operating permit.

  (40 CFR 63.1335(e)(1)(iii)(B))
- C. In any case not addressed by 40 CFR 63.1335(e)(1)(iii)(A) or (e)(1)(iii)(B), the owner or operator shall submit the information with the first Periodic Report, as required by 40 CFR Part 63 Subpart JJJ, which has a submission deadline at least 60 days after the information is obtained. (40 CFR 63.1335(e)(1)(iii)(B))

#### Appendix B Comments: 40 CFR Part 63 Subpart JJJ

- 1. For the purposes of 40 CFR Part 63 Subpart JJJ, National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (also known as P&R IV), Zeon is an existing Thermoplastic Product Process Unit (TPPU) affected source. Zeon has no Subpart JJJ MACT-required control devices. As defined in 40 CFR 63.1312, a Subpart JJJ MACT emission point means an individual continuous process vent, batch process vent, storage vessel, waste management unit, equipment leak, heat exchange system, or process contact cooling tower, or equipment subject to 40 CFR 63.149. A Subpart JJJ MACT emission point is not necessarily the same as a Title V Emission Point, and vice versa. Note, the convention used in this Permit is for emission point (all lower case letters) to reference a MACT emission point, and for Emission Point to reference a Title V Emission Point.
- 2. Zeon has one 40 CFR Part 63 Subpart JJJ associated system meeting the definition of Heat Exchange System in 40 CFR 63.1312 that is subject to 40 CFR 63.1328; however this system meets the condition of 40 CFR 63.104(a)(1), operating pressure differential, and it has no applicable requirements under 40 CFR 63.1328 with the differences as noted in 40 CFR 63.1328(c) through (h). (40 CFR 63.104(a) excludes from the requirements of that Section any sources that meet one or more of the conditions specified in 40 CFR 63.104(a)(1) through (a)(6).) (See Zeon's July 9, 2002 Supplement No. 1 to the November 16, 2001 NOCS required by 40 CFR Part 63 Subparts U and JJJ.)
- 3. The only raw material currently stored in a subject storage vessel that is predominantly associated with SAN production is styrene monomer. Per 40 CFR 63.1314(d), the provisions of 40 CFR Part 63 Subpart JJJ do not apply to storage vessels containing styrene at existing affected sources. Zeon is classified as an existing affected source for the purposes of 40 CFR Part 63 Subpart JJJ.
- 4. Batch process vent E-PLY-PLY-31 is a Group 2 batch process vent with annual emissions of organic HAP less than the level specified in 40 CFR 63.1323(d) (11,800 kg/yr, or 26,019 lbs/yr). Batch process vents E-SDR-2BLT, E-SDR-EBLT and E-SDR-WBLT, when processing SAN, are each a Group 2 batch process vent with annual emissions of organic HAP less than the level specified in 40 CFR 63.1323(d) (11,800 kg/yr, or 26,019 lbs/yr). All of these batch process vents are exempt from the batch mass input limit provisions of 40 CFR 63.1322(g) by 40 CFR 63.1322(g)(4) because each meets the criteria of 40 CFR 63.1322(h), and a batch mass input limitation is therefore not required to be established. Batch Process Vent E-SDR-2SD, which includes E-SDR-2SDCYC, when processing SAN, is a Group 2 Batch Process Vent with annual emissions of organic HAP greater than or equal to 11,800 kg/yr (26,019 lbs/yr). 40 CFR 63.1322(f) allows for compliance through the provisions of 40 CFR 63.1322(h), which are met. A batch mass input limitation is therefore also not required to be established for this batch process vent.
- 5. On December 19, 2000, Zeon submitted a request pursuant to 40 CFR 63.1335(e)(3)(vi) regarding the use of engineering assessments to determine the group status of the SAN Spray Dryer (Batch Process Vent E-SDR-2SD, including E-SDR-2SDCYC), when processing SAN material. Approval of this request was received from U.S. EPA Region 4 on January 25, 2001. On the basis of the approved engineering assessments, this is a

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Group 2 Batch Process Vent per 40 CFR 63.1323(g)(2) (*i.e.*, the cut-off flow rate is less than the annual average batch vent flow rate of the stream).

- 6. Zeon has no maintenance water streams that are classified as maintenance wastewater as defined in 40 CFR 63.1312 for the purposes of 40 CFR Part 63 Subpart JJJ. Zeon is therefore not subject to the requirements of 40 CFR 63.105 as referenced by 40 CFR 63.1330(c).
- 7. Because all 40 CFR Part 63 Subpart JJJ emission points (as defined in 40 CFR 63.1312) are Group 2 with no emissions averaging, and there are no LDAR control devices, a Start-Up, Shutdown and Malfunction Plan (SSMP) is not required per 40 CFR 63.1335(b)(1). Additionally, because there is no SSMP, there are no records of start-up, shutdown, and malfunction as specified in 40 CFR 63.1335(b)(1)(i) required, and there are no related reports of start-up, shutdown, and malfunction as specified in 40 CFR 63.1335(b)(1)(ii) required.
- 8. The non-LDAR Notification of Compliance Status (NOCS) for 40 CFR Part 63 Subpart JJJ was submitted by Zeon on November 16, 2001 in accordance with 40 CFR 63.1335(e)(5).
- 9. Non-Applicable Non-LDAR Periodic Report Requirements. The following 40 CFR Part 63 Subpart JJJ Periodic Report requirements of 40 CFR 63.1335(e)(6)(iii) are not applicable to Zeon (non-applicability basis): (A) information specified in 40 CFR 63.122 for storage vessels (Zeon has no Group 1 storage vessels); 40 CFR 63.117 and 40 CFR 63.118 and 63.1320 for continuous process vents, as applicable (Zeon has no continuous process vents); 63.104 for heat exchange systems (See Comment 2); and 40 CFR 63.146 for process wastewater (Zeon has no Group 1 wastewater, no Subpart JJJ MACTrequired control devices and no required monitoring); (B) daily average values of monitored parameters for all excursions, as defined in 40 CFR 63.1334(f) (Zeon has no required parametric monitoring under Subpart JJJ); (C) [Reserved]; (D)(1) supplements to the Emissions Averaging Plan (Zeon does not participate in an Emissions Averaging Plan); (D)(4) process wastewater streams sent for treatment pursuant to 40 CFR 63.132(g) (Zeon has no Group 1 wastewater); and (E) reports of start-up, shutdown, and malfunction of 40 CFR 63.1335(b)(1)(ii) (See Comment 7). In addition, also nonapplicable are 40 CFR 63.1335(e)(6)(iv) (All batch process vents are exempt from batch mass input limitation provisions (See Comment 4)); 40 CFR 63.1335(e)(6)(v) performance tests (No performance tests are required of Zeon under Subpart JJJ); 40 CFR 63.1335(e)(6)(viii) changes to predominant use determination for recovery operations (Zeon has no recovery operations subject to Subpart JJJ requirements); 40 CFR 63.1335(e)(6)(ix) and (x) reduced recordkeeping program as alternative to continuous operating parameter monitoring and recordkeeping provisions (Zeon is not required by Subpart JJJ to perform continuous operating parameter monitoring); and 40 CFR 63.1335(e)(6)(xi) and (xii) quarterly reporting for emission points included and not included in an emissions average (Zeon does not participate in emissions averaging).
- 10. Non-Applicable "Other Report" Requirements. The following 40 CFR Part 63 Subpart JJJ Other Report requirements of 40 CFR 63.1335(e)(7) are not applicable to Zeon (non-applicability basis): 40 CFR 63.1335(e)(7)(i) storage vessel inspections (Zeon has no Group 1 storage vessels); 40 CFR 63.1335(e)(7)(ii) requested approval for a nominal control efficiency for use in calculating credits for an emissions average (Zeon does not

participate in emissions averaging); and 40 CFR 63.1335(e)(7)(iii) for flexible operation units and termination of all thermoplastic products (Zeon has no flexible operation units and does not anticipate terminating production of all thermoplastic products).

11. MACT Non-LDAR Periodic Report Submittal Dates:

Report Description: 1st Subparts U/JJJ Non-LDAR Periodic Report (Semiannual)

1<sup>st</sup> Semiannual Non-LDAR

Report Period: November 16 through May 15

Report Due Date: July 14

Report Description: 2<sup>nd</sup> Subparts U/JJJ Non-LDAR Periodic Report (Semiannual)

2<sup>nd</sup> Semiannual Non-LDAR

Report Period: May 16 through November 15

Report Due Date: January 14

12. The following table outlines what HAP-containing raw material is predominantly associated with each MACT standard applicable to Emission Points listed in Emission Unit U-ZN.

	HAP-Containing Raw Material Monomer(s)
MACT Standard	Predominantly Associated with MACT
	Standard for MACT Assignment Purposes
40 CFR Part 63 Subpart U	Acrylonitrile and 1,3-Butadiene
40 CFR Part 63 Subpart JJJ	Styrene
40 CFR Part 63 Subpart FFFF	Ethyl Acrylate

# Appendix C: 40 CFR Part 63 Subpart EEEE

#### S1. Standards (Regulation 2.16, Section 4.1.1)

#### a. HAP (Non-LDAR 40 CFR Part 63 Subpart EEEE)

- i. Storage tanks and transfer racks that are part of an affected source under another 40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAP) are excluded from the 40 CFR Part 63 Subpart EEEE affected source. (40 CFR 63.2338(c)(1))
- ii. For Emission Point E-TKF-OLD: (See Comment 1 and Comment 2)
  - (1) For transfer racks only unloading organic liquids:
    - There are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart EEEE for transfer racks that only unload organic liquids. (Table 2 to 40 CFR Part 63 Subpart EEEE)
  - (2) For transfer racks unloading and loading organic liquids with total actual annual facility-level organic liquid loading volume through transfer racks of less than 800,000 gallons:

There are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart EEEE for these transfer racks. (Table 2 to 40 CFR Part 63 Subpart EEEE) (See Comment 3)

- iii. For Emission Points E-PLY-TK-150 and E-PLY-TK-152, when each storage tank is storing organic liquids, as defined in 40 CFR 63.2406:
  - Each storage tank has a capacity of less than 18.9 m<sup>3</sup> (5,000 gallons), thus there are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart EEEE. (See Comment 1 and Comment 2)
- iv. You must be in compliance with the emission limitations, operating limits, and work practice standards in 40 CFR Part 63 Subpart EEEE at all times when the equipment identified in 40 CFR 63.2338(b)(1) through 63.2338(b)(4) is in OLD operation. (40 CFR 63.2350(a))
- v. You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). (40 CFR 63.2350(b))

#### S2. Monitoring and Record Keeping (Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2)

The owner or operator of an affected source subject to the provisions of 40 CFR Part 63 Subpart EEEE shall maintain files of all information required by 40 CFR Part 63 Subpart EEEE recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on

computer floppy disks, on magnetic tape disks, or on microfiche. (40 CFR 63.10(b) as referenced by 40 CFR 63.2343 and Table 12 to 40 CFR Part 63 Subpart EEEE)

#### a. HAP (Non-LDAR 40 CFR Part 63 Subpart EEEE) (See Comment 4)

- i. For each emission source identified in 40 CFR 63.2338 that does not require control under 40 CFR Part 63 Subpart EEEE, you must keep all records identified in 40 CFR 63.2343. (40 CFR 63.2390(a)) (See Comment 5)
- ii. 40 CFR 63.2343 establishes the recordkeeping requirements for emission sources identified in 40 CFR 63.2338 that do not require control under 40 CFR Part 63 Subpart EEEE (*i.e.*, under 40 CFR 63.2346(a) through (e)). Such emission sources are not subject to any other recordkeeping Sections in 40 CFR Part 63 Subpart EEEE, including 40 CFR 63.2350(c), except as indicated in 40 CFR 63.2343(a) through (d). (40 CFR 63.2343 as referenced by 40 CFR 63.2390(a)) (See Comment 2)

You must keep the following records:

(1) For Emission Points E-PLY-TK-150 and E-PLY-TK-152 (when each is storing organic liquids, as defined in 40 CFR 63.2406), and E-TKF-OLD Transfer Racks Only Unloading Organic Liquids:

For each storage tank subject to 40 CFR Part 63 Subpart EEEE having a capacity of less than 18.9 cubic meters (5,000 gallons) and for each transfer rack subject to 40 CFR Part 63 Subpart EEEE that only unloads organic liquids (i.e., no organic liquids are loaded at any of the transfer racks), you must keep documentation that verifies that each storage tank and transfer rack identified in 40 CFR 63.2343(a) is not required to be controlled. documentation must be kept up-to-date (i.e., all such emission sources at a facility are identified in the documentation regardless of when the documentation was last compiled) and must be in a form suitable and readily available for expeditious inspection and review according to 40 CFR 63.10(b)(1), including records stored in electronic form in a separate location. The documentation may consist of identification of the tanks and transfer racks identified in 40 CFR 63.2343(a) on a plant site plan or process and instrumentation diagram (P&ID). (40 CFR 63.2343(a))

- (2) For Emission Point E-TKF-OLD, a transfer rack subject to 40 CFR Part 63 Subpart EEEE that loads organic liquids but is not subject to control based on the criteria specified in Table 2 to 40 CFR Part 63 Subpart EEEE, items 7 through 10, you must comply with the recordkeeping requirements specified in 40 CFR 63.2343(c)(3). (40 CFR 63.2343(c))
  - (a) For each transfer rack that meets the conditions identified in 40 CFR 63.2343(c), you must keep documentation, including the records specified in 40 CFR 63.2390(d), that verifies the transfer rack is not required to be controlled

under 40 CFR Part 63 Subpart EEEE. The documentation must be kept up-to-date and must be in a form suitable and readily available for expeditious inspection and review according to 40 CFR 63.10(b)(1), including records stored in electronic form in a separate location. (40 CFR 63.2343(c)(3))

(b) You must keep records of the total actual annual facility-level organic liquid loading volume as defined in 40 CFR 63.2406 through transfer racks to document the applicability, or lack thereof, of the emission limitations in Table 2 to 40 CFR Part 63 Subpart EEEE, items 7 through 10. (40 CFR 63.2390(d) as referenced by 40 CFR 63.2343(c)(3))

#### S3. Reporting (Regulation 2.16, Section 4.1.9.3)

#### a. HAP (Non-LDAR 40 CFR Part 63 Subpart EEEE)

The owner or operator of an affected source subject to the provisions of 40 CFR Part 63 Subpart EEEE shall maintain files of all reports and notifications required by 40 CFR Part 63 Subpart EEEE recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each report or notification. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. (40 CFR 63.10(b) as referenced by 40 CFR 63.2343 and Table 12 to 40 CFR Part 63 Subpart EEEE)

Duplicative reporting is not required. For example, information required to be submitted in the MACT Non-LDAR Compliance Report is not required to also be submitted in the Title V Semi-Annual Compliance Reports.

40 CFR 63.2343 establishes the notification and reporting requirements for emission sources identified in 40 CFR 63.2338 that do not require control under 40 CFR Part 63 Subpart EEEE (*i.e.*, under 40 CFR 63.2346(a) through (e)). Such emission sources are not subject to any other notification or reporting Sections in 40 CFR Part 63 Subpart EEEE, including 40 CFR 63.2350(c), except as indicated in 40 CFR 63.2343(a) through (d). (40 CFR 63.2343) (See Comment 2 and Comment 6)

# MACT Non-LDAR Compliance Report: (40 CFR 63.2343) (See Comment 2 and Comment 9)

#### i. For Emission Point E-TKF-OLD:

For each transfer rack subject to 40 CFR Part 63 Subpart EEEE that loads organic liquids but is not subject to control based on the criteria specified in Table 2 to 40 CFR Part 63 Subpart EEEE, items 7 through 10, you must comply with the reporting requirements specified in 40 CFR 63.2343(c)(2). (40 CFR 63.2343(c))

(1) After the first Compliance Report, you must submit a subsequent Compliance report according to the schedule in 40 CFR 63.2386(b) whenever any of the events in 40 CFR 63.2343(d) occur, as applicable. (40 CFR 63.2343(c)(2)(i)) (See Comment 7 and Comment 9)

- (a) If required, the subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. (40 CFR 63.2386(b)(2)(i))
- (b) If required, the subsequent Compliance report must be postmarked no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. (40 CFR 63.2386(b)(2)(ii))
- (2) If required, your subsequent Compliance Reports must contain the information in 40 CFR 63.2386(c)(1), (2), (3) and, as applicable, in 40 CFR 63.2386(d)(3) and (4). If you are already submitting a subsequent Compliance Report under 40 CFR 63.2386(d), you do not need to submit a separate subsequent Compliance report for each transfer rack that meets the conditions identified in 40 CFR 63.6343(c) (*i.e.*, a single subsequent Compliance Report should be submitted). (40 CFR 63.2343(c)(2)(ii)
  - (a) Company name and address. (40 CFR 63.2386(c)(1))
  - (b) Statement by a responsible official, including the official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete. (40 CFR 63.2386(c)(2))
  - (c) Date of report and beginning and ending dates of the reporting period. (40 CFR 63.2386(c)(3))
  - (d) As applicable, a listing of any storage tank that became subject to controls based on the criteria for control specified in Table 2 to 40 CFR Part 63 Subpart EEEE, items 1 through 6, since the filing of the last Compliance Report. (40 CFR 63.2386(d)(3)(i))
  - (e) As applicable, a listing of any transfer rack that became subject to controls based on the criteria for control specified in Table 2 to 40 CFR Part 63 Subpart EEEE, items 7 through 10, since the filing of the last Compliance Report. (40 CFR 63.2386(d)(3)(ii))
  - (f) As applicable, a listing of tanks greater than or equal to 18.9 cubic meters (5,000 gallons) that became part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of 40 CFR Part 63 Subpart EEEE, since the last Compliance Report. (40 CFR 63.2386(d)(4)(i))

(g) As applicable, a listing of all transfer racks (except those racks at which only the unloading of organic liquids occurs) that became part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart, since the last Compliance Report. (40 CFR 63.2386(d)(4)(ii))

- ii. If one more of the events identified in 40 CFR 63.2343(d)(1) through (4) occur since the filing of the Notification of Compliance Status or the last Compliance Report, you must submit a subsequent Compliance Report as specified in 40 CFR 63.2343(b)(2) and (c)(2). (40 CFR 63.2343(d))
  - (1) Any storage tank or transfer rack became subject to control under 40 CFR Part 63 Subpart EEEE; or (40 CFR 63.2343(d)(1))
  - (2) Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) became part of the affected source but is not subject to any of the emission limitations, operating limits, or work practice standards of 40 CFR Part 63 Subpart EEEE; or (40 CFR 63.2343(d)(2))
  - (3) Any transfer rack (except those racks at which only unloading of organic liquids occurs) became part of the affected source; or (40 CFR 63.2343(d)(3))
  - (4) Any of the information required in 40 CFR 63.2386(c)(1), 40 CFR 63.2386(c)(2), or 40 CFR 63.2386(c)(3) has changed.
    - (a) Company name and address. (40 CFR 63.2386(c)(1))
    - (b) Statement by a responsible official, including the official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete. (40 CFR 63.2386(c)(2))
    - (c) Date of report and beginning and ending dates of the reporting period. (40 CFR 63.2386(c)(3))

#### Appendix C Comments: 40 CFR Part 63 Subpart EEEE

- 1. For the purposes of 40 CFR Part 63 Subpart EEEE, *National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)*, commonly known as the OLD MACT, Zeon is an **existing** affected source that consists entirely of emission sources not requiring control under 40 CFR Part 63 Subpart EEEE. Zeon's OLD operations have no OLD MACT-required control devices. An OLD MACT emission source, as identified in 40 CFR 63.2338, is not necessarily the same as a Title V Emission Point, and vice versa. Note, the convention used in this Permit is for *emission source* (all lower case letters) to reference a MACT emission source, and for *Emission Point* to reference a Title V Emission Point.
- 2. Zeon's OLD existing affected source consists of transfer racks that only unload organic liquids; one transfer rack that unloads organic liquids and may load organic liquids; and storage tanks having a capacity of less than 18.9 cubic meters (5,000 gallons). Zeon has no storage tanks subject to the OLD MACT having a capacity of 18.9 cubic meters (5,000 gallons) or more. Each of Zeon's OLD operations (emission sources) is not subject to control based on the applicability criteria specified in Table 2 to 40 CFR Part 63 Subpart EEEE. Zeon's OLD existing affected source thus consists entirely of emission sources identified in 40 CFR 63.2338 that do not require control, and the requirements of 40 CFR 63.2343 (which apply to all emission sources not requiring control) apply to Zeon's OLD existing affected source in its entirety.
- 3. Per 40 CFR 63.2406, total actual annual facility-level organic liquid loading volume means the total facility-level actual volume of organic liquid loaded for transport within or out of the facility through transfer racks that are part of the affected source into transport vehicles, based on a 3-year rolling average, calculated annually. For existing affected sources, each 3-year rolling average is based on actual facility-level loading volume during each calendar year (January 1 through December 31) in the 3-year period.
- 4. A Start-Up, Shutdown and Malfunction Plan (SSMP) is not required for Zeon's OLD existing affected source. Per 40 CFR 63.2350(c), as referenced by 40 CFR 63.2343, emission sources not required to be controlled as specified in 40 CFR 63.2343 are not required to develop a written SSMP according to the provisions in 40 CFR 63.6(e)(3).
- 5. Non-Applicable Requirements for Emission Sources Not Requiring Control. The following requirements of 40 CFR 63.2343 for emission sources not requiring control is not applicable to Zeon (non-applicability basis): 40 CFR 63.2343(b) for storage tanks having a capacity of 18.9 cubic meters (5,000 gallons) or more that are not subject to control (Zeon has no OLD storage tanks having a capacity of 18.9 cubic meters (5,000 gallons) or more). (See Comment 2)
- 6. Zeon submitted its OLD MACT Notification of Compliance Status (NOCS) on September 18, 2007. Although 40 CFR 63.2343 did not specifically require an NOCS to be submitted, and, in fact, an NOCS was specifically not required to be submitted by 40 CFR 63.2382(d)(1), Zeon submitted an NOCS to address the NOCS reference contained in 40 CFR 63.2343(c)(1)(ii)(A). (See Comment 9)
- 7. Zeon submitted its OLD MACT First Compliance Report for the time period of February 5, 2007 (OLD MACT existing affected source final compliance date) through June 30, 2007 on September 18, 2007 in accordance with 40 CFR 63.2343.

8. Zeon has no applicable equipment leak provisions under 40 CFR Part 63 Subpart EEEE (OLD MACT). The OLD MACT equipment leak requirements of 40 CFR 63.2346(c) only apply to the OLD existing affected source if there is at least one storage tank or transfer rack that meets the applicability criteria for control in Table 2 to 40 CFR Part 63 Subpart EEEE. Zeon's OLD existing affected source does not contain a storage tank or transfer rack that meets this applicability criteria for control, and 40 CFR 63.2346(c) is therefore not applicable to Zeon's OLD affected source.

9. OLD MACT Non-LDAR Compliance Report Submittal Dates (Compliance Reports are not routinely required to be submitted. After the first Compliance Report, subsequent Compliance Reports are submitted only whenever any of the events in 40 CFR 63.2343(d) occurs, as applicable. If none of the events occurs, no Compliance Report is required to be submitted.)

Report Description: 1st Semiannual OLD MACT Compliance Report (If Required)

1st Semiannual Non-LDAR

Report Period: January 1 through June 30

Report Due Date: July 31

Report Description: 2nd Semiannual OLD MACT Compliance Report (If Required)

2nd Semiannual Non-LDAR

Report Period: July 1 through December 31

Report Due Date: January 31

# Appendix D: 40 CFR Part 63 Subpart FFFF

- S1. Standards (Regulation 2.16, Section 4.1.1)
  - a. HAP (Non-LDAR 40 CFR Part 63 Subpart FFFF)
    (See Comment 1, Comment 2, Comment 3, and Comment 4)
    - i. Zeon is subject to the requirements of 40 CFR Part 63 Subpart FFFF because Zeon owns or operates a Miscellaneous Organic Chemical Manufacturing Process Unit (MCPU), as defined in 40 CFR 63.2550, and the MCPU is not an affected source or part of an affected source under another 40 CFR Part 63 Subpart, except for process vents from batch operations within a Chemical Manufacturing Process Unit (CMPU), as identified in 40 CFR 63.100(j)(4). (40 CFR 63.2435(a) and (b)(3))
    - ii. If the predominant use of a transfer rack loading arm or storage tank (including storage tanks in series) is associated with a MCPU, and the loading arm or storage tank is not part of an affected source under a 40 CFR Part 63 Subpart, then you must assign the loading arm or storage tank to the MCPU for that miscellaneous organic chemical manufacturing process. (40 CFR 63.2435(d))
    - iii. Opening a safety device, as defined in 40 CFR 63.2550, is allowed at any time conditions require it to avoid unsafe conditions. (40 CFR 63.2450(p))
    - iv. For Emission Points E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, E-TKF-TK-109, E-PLY-BLTTK-13, E-PLY-BLTTK-14, E-PLY-BLTTK-15, E-PLY-BLTTK-16, E-PLY-BLTTK-17, E-PLY-BLTTK-18, E-PLY-BLTTK-19, E-PLY-BLTTK-27, E-PLY-BLTTK-28, E-PLY-BLTTK-29, E-PLY-BLTTK-30, E-DRY-TK-202, E-DRY-TK-203, and E-DRY-TK-204: (See Comment 5)
      - (1) When an Emission Point is storing material predominantly associated with the MCPU, as defined in 40 CFR 63.2550, that contains no organic HAP, or organic HAP only as impurities:
        - Each Emission Point is not considered a storage tank for the purposes of 40 CFR Part 63 Subpart FFFF. (40 CFR 63.2550 (Definition of Storage Tank))
      - (2) When each of Emission Points E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, or E-TKF-TK-109 is storing organic HAP-containing raw materials predominantly associated with the MCPU, as defined in 40 CFR 63.2550:
        - (a) Each Emission Point is a Group 2 Storage Tank. (40 CFR 63.2550 (Definition of Group 2 Storage Tank))
          - [Each Emission Point has a storage capacity greater than or equal to 10,000 gallons, and each stores material that has a maximum true vapor pressure of total HAP less than 6.9

- kilopascals (51.74 mmHg) at an existing MCPU affected source.]
- (b) There are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart FFFF for Group 2 Storage Tanks. (40 CFR 63.2550 (Definition of Group 2 Storage Tank) and 40 CFR 63.2470 (References Table 4 to 40 CFR Part 63 Subpart FFFF)) (See Comment 1 and Comment 6)
- (3) For Emission Points E-PLY-BLTTK-13, E-PLY-BLTTK-14, E-PLY-BLTTK-15, E-PLY-BLTTK-16, E-PLY-BLTTK-17, E-PLY-BLTTK-18, E-PLY-BLTTK-19, E-PLY-BLTTK-27, E-PLY-BLTTK-28, E-PLY-BLTTK-29 and E-PLY-BLTTK-30:
  - (a) Each Emission Point is a Group 2 Storage Tank. (40 CFR 63.2550 (Definition of Group 2 Storage Tank))
    - [Each Emission Point has a storage capacity greater than or equal to 10,000 gallons, and each stores material that has a maximum true vapor pressure of total HAP less than 6.9 kilopascals (51.74 mmHg) at an existing MCPU affected source.]
  - (b) There are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart FFFF for Group 2 Storage Tanks. (40 CFR 63.2550 (Definition of Group 2 Storage Tank) and 40 CFR 63.2470 (References Table 4 to 40 CFR Part 63 Subpart FFFF)) (See Comment 1 and Comment 6)
- (4) For Emission Points E-DRY-TK-202, E-DRY-TK-203, and E-DRY-TK-204, when each is storing organic HAP-containing raw materials predominantly associated with the MCPU, as defined in 40 CFR 63.2550:
  - (a) Each Emission Point is a Group 2 Storage Tank. (40 CFR 63.2550 (Definition of Group 2 Storage Tank))
    - [Each Emission Point has a storage capacity less than 10,000 gallons, and each may store any material regardless of the maximum true vapor pressure of total HAP of the material.]
  - (b) There are no applicable non-LDAR standards contained in 40 CFR Part 63 Subpart FFFF for Group 2 Storage Tanks. (40 CFR 63.2550 (Definitions of Group 1 Storage Tank and Group 2 Storage Tank) and 40 CFR 63.2470 (References Table 4 to 40 CFR Part 63 Subpart FFFF)
- v. For individual Batch Process Vent Emission Points E-PLY-TK-101, E-PLY-TK-102, E-PLY-PLY-37 or E-PLY-PLY-38, and E-PLY-CN-101/2/VP:
  - (1) Each Emission Point is an individual Group 2 Batch Process Vent. (40 CFR 63.2550 (Definition of Group 2 Batch Process Vent))

- [The collective uncontrolled organic HAP emissions from all of the batch process vents are less than 10,000 lb/yr]
- (2) There are no applicable non-LDAR standards under 40 CFR Part 63 Subpart FFFF for Group 2 Batch Process Vents. (40 CFR 63.2550 (Definition of Group 2 Batch Process Vent) and Table 2 to 40 CFR Part 63 Subpart FFFF as referenced by 40 CFR 63.2460(a)) (See Comment 1, Comment 7, Comment 8, and Comment 9)
- vi. For 40 CFR 63 Subpart FFFF wastewater (as defined in 40 CFR 63.2550): (See Comment 2 and Comment 10)
  - (1) All 40 CFR Part 63 Subpart FFFF process wastewater streams (Wastewater Point of Determination (POD) E-PLY-PLY-37 and E-PLY-PLY-38) are Group 2 process wastewater. There are no applicable non-LDAR standards for Group 2 process wastewater. (40 CFR 63.132(a)(3) as referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o))
  - (2) For Maintenance Wastewater (Wastewater Point of Determination (POD) E-PLY-PLY-37 and E-PLY-PLY-38):
    - There are no applicable non-LDAR standards for maintenance wastewater. (40 CFR 63.105 as referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o))
- vii. Zeon must be in compliance with the emission limits and work practice standards in Tables 1 through 7 to 40 CFR Part 63 Subpart FFFF at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in 40 CFR 63.2455 through 40 CFR 63.2490 (or the alternative means of compliance in 40 CFR 63.2495, 40 CFR 63.2500, or 40 CFR 63.2505), except as specified in 40 CFR 63.2450(b) through (s). (40 CFR 63.2450(a)) (See Comment 11)

#### S2. Monitoring and Record Keeping (Regulation 2.16 Section 4.1.9.1 and 4.1.9.2)

The owner or operator of an affected source subject to the provisions of 40 CFR Part 63 Subpart FFFF shall maintain files of all information required by 40 CFR Part 63 Subpart FFFF recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. (40 CFR 63.10(b) as referenced by 40 CFR 63.2525(a) and Table 12 to 40 CFR Part 63 Subpart FFFF)

#### a. HAP (Non-LDAR 40 CFR Part 63 Subpart FFFF)

i. The owner or operator must keep the records specified in 40 CFR 63.2525(a) through (k), as applicable. (40 CFR 63.2525) (See Comment 12)

(1) Each applicable record required by 40 CFR Part 63 Subpart A. (40 CFR 63.2525(a))

- (2) Records of each operating scenario as specified in 40 CFR 63.2525(b)(1) through (8). (40 CFR 63.2525(b)) (See Comment 12, Comment 13, and Comment 14)
  - (a) A description of the process and the type of process equipment used. (40 CFR 63.2525(b)(1))
  - (b) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in 40 CFR 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks. (40 CFR 63.2525(b)(2))
  - (c) Calculations and engineering analyses required to demonstrate compliance. (40 CFR 63.2525(b)(7))
  - (d) For reporting purposes, a change to any of these elements not previously reported, except for 40 CFR 63.2525(b)(5), constitutes a new operating scenario. (40 CFR 63.2525(b)(8))
- (3) The information specified in 40 CFR 63.2525(e)(2), (3) or (4), as applicable, for each process with Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. No records are required for situations described in 40 CFR 63.2525(e)(1). (40 CFR 63.2525(e)) (See Comment 12)
  - (a) If you meet none of the conditions specified in 40 CFR 63.2525(e)(1) through (3), you must keep records of the information specified in 40 CFR 63.2525(e)(4)(i) through (iv). (40 CFR 63.2525(e)(4))
    - (i) A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions. (40 CFR 63.2525(e)(4)(i))
    - (ii) A record of whether each batch operated was considered a standard batch. (40 CFR 63.2525(e)(4)(ii))
    - (iii) The estimated uncontrolled and controlled emissions for each batch that is considered to be a non-standard batch. (40 CFR 63.2525(e)(4)(iii))
    - (iv) Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (*e.g.*, number of batches), calculated no less frequently than monthly. (40 CFR 63.2525(e)(4)(iii)) Zeon has elected to maintain records of the daily 365-day rolling summation of

the number of actual batches, calculated no less frequently than monthly. (See Comment 16)

- (4) A record of each time a safety device is opened to avoid unsafe conditions in accordance with 40 CFR 63.2450(p). (40 CFR 63.2525(f))
- (5) In the SSMP required by 40 CFR 63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment. (40 CFR 63.2525(j)) (See Comment 11)
- ii. If you have a Group 2 emission point that becomes a Group 1 emission point after the compliance date for your affected source, you must comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration as specified in 40 CFR Part 63 Subpart FFFF must be conducted within 150 days after the switch occurs. (40 CFR 63.2445(d))
- iii. You may change from Group 2 to Group 1 in accordance with either 40 CFR 63.2460(b)(6)(i) or (ii). You must comply with the requirements of 40 CFR 63.2460 and submit the test report in the next Compliance Report. (40 CFR 63.2460(b)(6))
  - (1) You may switch at any time after operating as Group 2 for at least 1 year so that you can show compliance with the 10,000 pounds per year (lb/yr) threshold for Group 2 batch process vents for at least 365 days before the switch. You may elect to start keeping records of emissions from Group 2 batch process vents before the compliance date. Report a switch based on this provision in your next Compliance Report in accordance with 40 CFR 63.2520(e)(10)(i). (40 CFR 63.2460(b)(6)(i))
  - (2) If the conditions in 40 CFR 63.2460(b)(6)(i) are not applicable, you must provide a 60-day advance notice in accordance with 40 CFR 63.2520(e)(10)(ii) before switching. (40 CFR 63.2460(b)(6) (ii))
- iv. For 40 CFR Part 63 Subpart FFFF wastewater (as defined in 40 CFR 63.2550):
  - (1) For Group 2 Process Wastewater (Wastewater Point of Determination (POD) E-PLY-PLY-37 and E-PLY-PLY-38): (Table 7 to 40 CFR Part 63 Subpart FFF which references 40 CFR 63.132 through 40 CFR 63.148 and the requirements referenced therein, except as specified in 40 CFR 63.2485) (See Comment 10 and Comment 17)
    - (a) The owner or operator shall comply with the applicable recordkeeping requirements specified in 40 CFR 63.147(b)(8). (40 CFR 63.132(a)(3) as referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart

FFFF, except as specified in 40 CFR 63.2485(b) through (o))

- (b) For each Group 2 process wastewater stream, the owner or operator shall keep in a readily accessible location the records specified in 40 CFR 63.147(b)(8)(i) through (iv). (40 CFR 63.147(b)(8) as referenced by 40 CFR 63.132(a)(3), 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o))
  - (i) Process unit identification and description of the process unit. (40 CFR 63.147(b)(8)(i) as referenced by 40 CFR 63.132(a)(3), 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o))
  - (ii) Stream identification code. (40 CFR 63.147(b)(8)(ii) as referenced by 40 CFR 63.132(a)(3), 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o))
  - (iii) For existing sources, concentration of compound(s) in Tables 8 and 9 to 40 CFR Part 63 Subpart FFFF in parts per million by weight. Include documentation of the methodology used to determine concentration. (40 CFR 63.147(b)(8)(iii) as referenced by 40 CFR 63.132(a)(3), 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o))
  - (iv) Flow rate in liter per minute. (40 CFR 63.147(b)(8)(iv) as referenced by 40 CFR 63.132(a)(3), 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o))
- (c) If the owner or operator uses process knowledge to determine the annual average concentration of a wastewater stream as specified in 40 CFR 63.144(b)(3) and/or uses process knowledge to determine the annual average flow rate as specified in 40 CFR 63.144(c)(1), and determines that the wastewater stream is not a Group 1 wastewater stream, the owner or operator shall keep in a readily accessible location the documentation of how process knowledge was used to determine the annual average concentration and/or the annual average flow rate of the wastewater stream. (40 CFR 63.147(f) as referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart

FFFF, except as specified in 40 CFR 63.2485(b) through 40 CFR 63.2485(o))

- (2) For Maintenance Wastewater (Wastewater Point of Determination (POD) E-PLY-PLY-37 and E-PLY-PLY-38): (Table 7 to 40 CFR Part 63 Subpart FFFF which references 40 CFR 63.105 and the requirements referenced therein, except as specified in 40 CFR 63.2485) (See Comment 10)
  - (a) Each owner or operator of a source subject to 40 CFR Part 63 Subpart FFFF shall comply with the requirements of 40 CFR 63.105(b) through (e) for maintenance wastewaters containing those organic HAPs listed in Tables 8 and 9 to 40 CFR Part 63 Subpart FFFF. (40 CFR 63.105(a) as referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o))
    - (i) The owner or operator shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (*i.e.*, a maintenance turn-around) and during periods which are not shutdowns (*i.e.*, routine maintenance). The descriptions shall: (40 CFR 63.105(b) as referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (0))
      - A. Specify the process equipment or maintenance tasks that are anticipated to wastewater during maintenance create 63.105(b)(1) activities. (40)CFR referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (0)
      - B. Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and (40 CFR 63.105(b)(2) as referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (0))
      - C. Specify the procedures to be followed when clearing materials from process equipment. (40 CFR 63.105(b)(3) as referenced by 40

CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o))

- (ii) The owner or operator shall modify and update the information required by 40 CFR 63.105(b) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. (40 CFR 63.105(c) as referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o))
- (iii) The owner or operator shall incorporate the procedures described in 40 CFR 63.105(b) and (c) as part of the Start-Up, Shutdown and Malfunction Plan required under 40 CFR 63.6(e)(3). (40 CFR 63.105(d) as referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o), as applicable) (See Comment 11)
- (iv) The owner or operator shall maintain a record of the information required by 40 CFR 63.105(b) and (c) as part of the Start-Up, Shutdown and Malfunction Plan required under 40 CFR 63.6(e)(3). (40 CFR 63.105(e) as referenced by 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o), as applicable) (See Comment 11)

#### S3. Reporting (Regulation 2.16, Section 4.1.9.3)

#### a. HAP (Non-LDAR 40 CFR Part 63 Subpart FFFF)

The owner or operator of an affected source subject to the provisions of 40 CFR Part 63 Subpart FFFF shall maintain files of all reports and notifications required by 40 CFR Part 63 Subpart FFFF recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each report or notification. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. (40 CFR 63.10(b) as referenced by 40 CFR 63.2520(a) and Table 12 to 40 CFR Part 63 Subpart FFFF)

Duplicative reporting is not required. For example, information required to be submitted in the MACT Non-LDAR Compliance Report is not required to also be submitted in the Title V Semi-Annual Compliance Reports.

#### MACT Non-LDAR Compliance Report: (40 CFR 63.2520(e))

i. The owner or operator shall submit a Compliance Report semiannually according to the requirements of 40 CFR 63.2520(b). (Table 11 to 40 CFR Part 63 Subpart FFFF as referenced by 40 CFR 63.2520(b)) (See Comment 20)

- (1) After the first Compliance Report, each subsequent Compliance Report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. (40 CFR 63.2520(b)(3)) (See Comment 15 and Comment 20)
- (2) After the first Compliance Report, each subsequent compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the semiannual reporting period. (40 CFR 63.2520(b)(4)) (See Comment 15 and Comment 20)
- (3) For each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70 or 40 CFR Part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit subsequent Compliance Reports according to the dates the permitting authority has established instead of according to the dates in 40 CFR 63.2520(b)(3) and (4). (40 CFR 63.2520(b)(5))
- ii. The Compliance Report must contain the information specified in 40 CFR 63.2520(e)(1) through (10). (40 CFR 63.2520(e)) (See Comment 18)
  - (1) Company name and address. (40 CFR 63.2520(e)(1))
  - (2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report. (40 CFR 63.2520(e)(2))
  - (3) Date of report and beginning and ending dates of the reporting period. (40 CFR 63.2520(e)(3))
  - (4) For each SSM during which excess emissions occur, the Compliance Report must include records that the procedures specified in your Start-Up, Shutdown and Malfunction Plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction. (40 CFR 63.2520(e)(4)) (See Comment 11)
  - (5) The Compliance Report must contain the information on deviations, as defined in 40 CFR 63.2550, according to 40 CFR 63.2520(e)(5)(i), (ii), (iii), and (iv). (40 CFR 63.2520(e)(5))
    - (a) If there are no deviations from any emission limit, operating limit or work practice standard specified in 40 CFR Part 63 Subpart FFFF, include a statement that there were no deviations from the emission limits, operating

- limits, or work practice standards during the reporting period. (40 CFR 63.2520(e)(5)(i))
- (b) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standard in 40 CFR Part 63 Subpart FFFF, you must include the information in 40 CFR 63.2520(e)(5)(ii)(A) through (C). This includes periods of SSM. (40 CFR 63.2520(e)(5)(ii)) (See Comment 11)
  - (i) The total operating time of the affected source during the reporting period. (40 CFR 63.2520(e)(5)(ii)(A))
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. (40 CFR 63.2520(e)(5)(ii)(B))
  - (iii) Operating logs of processes with batch vents from batch operations for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks. (40 CFR 63.2520(e)(5)(ii)(C))
- (6) Include each new operating scenario which has been operated since the time period covered by the last Compliance Report and has not been submitted in the notification of compliance status report or a previous Compliance Report. For each new operating scenario, you must provide verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario. (40 CFR 63.2520(e)(7))
- (7) Applicable records and information for periodic reports as specified in referenced 40 CFR Part 63 Subparts F, G, H, SS, UU, WW and GGG and 40 CFR Part 65 Subpart F. (40 CFR 63.2520(e)(9)) (See Comment 19)
- (8) Notification of process change: (40 CFR 63.2520(e)(10))
  - (a) Except as specified in 40 CFR 63.2520(e)(10)(ii), whenever you make a process change, or change any of the information submitted in the Notification of Compliance Status Report or a previous Compliance Report, that is not within the scope of an existing operating scenario, you must document the change in your Compliance Report. A process change does not include moving within a range of

conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all of the information in 40 CFR 63.2520(e)(10)(i)(A) through (C). (40 CFR 63.2520(e)(10)(i))

- (i) A description of the process change. (40 CFR 63.2520(e)(10)(i)(A))
- (ii) Revisions to any of the information reported in the original Notification of Compliance Status Report under 40 CFR 63.2520(d). (40 CFR 63.2520(e)(10)(i)(B))
- (iii) Information required by the Notification of Compliance Status Report under 40 CFR 63.2520(d) for changes involving the addition of processes or equipment at the affected source. (40 CFR 63.2520(e)(10)(i)(C))
- (b) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in 40 CFR 63.2520(e)(10)(ii)(A), (B), or (C). (40 CFR 63.2520(e)(10)(ii)) (See Comment 18)
  - (i) Any change to the information contained in the precompliance report.(40 CFR 63.2520(e)(10)(ii)(A))
  - (ii) A change in status of a control device from small to large. (40 CFR 63.2520(e)(10)(ii)(B))
  - (iii) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in 40 CFR 63.2460(b)(6)(i). (40 CFR 63.2520(e)(10)(ii)(C))

#### Appendix D Comments: 40 CFR Part 63 Subpart FFFF

- 1. For the purposes of 40 CFR Part 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, commonly known as the MON MACT, Zeon is an existing Miscellaneous Organic Chemical Manufacturing Process Unit (MCPU) affected source. Zeon has no MON MACT-required control devices. As defined in 40 CFR 63.2550, a MON MACT emission point means each continuous process vent, batch process vent, storage tank, transfer rack, and wastewater stream. A MON MACT emission point is not necessarily the same as a Title V Emission Point, and vice versa. Note, the convention used in this Permit is for emission point (all lower case letters) to reference a MACT emission point, and for Emission Point to reference a Title V Emission Point.
- 2. Zeon has no liquid streams in open systems within its MCPU as defined in 40 CFR 63.149, as referenced by Table 7 to 40 CFR Part 63 Subpart FFFF and with the exceptions noted in 40 CFR 63.2485(l), and Zeon is thus not subject to the applicable requirements of 40 CFR 63.2485 for such liquid streams.
- 3. Zeon has no 40 CFR Part 63 Subpart FFFF associated system meeting the definition of Heat Exchange System in 40 CFR 63.101 as referenced by 40 CFR 63.2490(a) and Table 10 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2490(b) and (c). Zeon is therefore not subject to the 40 CFR Part 63 Subpart FFFF Heat Exchange System provisions of 40 CFR 63.2490.
- 4. Zeon has no transfer racks subject to 40 CFR Part 63 Subpart FFFF.
- 5. As defined in 40 CFR 63.2550, a *process tank* has emissions that are related to the characteristics of the batch cycle, and it does not accumulate product over multiple batches. Because blend tanks and coagulation feed tanks accumulate product over multiple batches, Zeon's MCPU blend tanks and coagulation feed tanks are not process tanks; rather, they are considered to be *storage tanks* for the purposes of 40 CFR Part 63 Subpart FFFF.
- 6. Per 40 CFR 63.2550, *maximum true vapor pressure* has the meaning given in 40 CFR 63.111, except that, under 40 CFR Part 63 Subpart FFFF, it applies to all HAP rather than only organic HAP.
- 7. Per the MON MACT definition of *batch process vent* found in 40 CFR 63.2550, the following Zeon vents are not considered batch process vents for the purposes of 40 CFR Part 63 Subpart FFFF: Vents on Storage Tanks (when storing organic HAP-containing raw materials predominantly associated with the MCPU, as defined in 40 CFR 63.2550) E-TKF-TK-101, E-TKF-TK-102, E-TKF-TK-103, E-TKF-TK-104, E-TKF-TK-105, E-TKF-TK-106, E-TKF-TK-107, E-TKF-TK-108, E-TKF-TK-109, E-DRY-TK-202, E-DRY-TK-203, and E-DRY-TK-204; Vents on Storage Tanks E-PLY-BLTTK-13, E-PLY-BLTTK-14, E-PLY-BLTTK-15, E-PLY-BLTTK-16, E-PLY-BLTTK-17, E-PLY-BLTTK-18, E-PLY-BLTTK-19, E-PLY-BLTTK-27, E-PLY-BLTTK-28, E-PLY-BLTTK-29 and E-PLY-BLTTK-30; Vent on E-PLY-TK-103C (Part of MCPU but contains no organic HAP); and Vents from E-DRY-NTK-15H, E-DRY-NSCR-1, E-DRY-NTK-16H, E-DRY-NTK-17H, E-DRY-NSCR-2, E-DRY-NTK-18H, E-DRY-NPRS-1, E-DRY-NGR-1H and E-DRY-NDR (Emission streams from emission episodes that are undiluted and uncontrolled containing less than 50 ppmv HAP are not part of any

batch process vent). There are thus no non-LDAR standards, and no non-LDAR monitoring and recordkeeping, and no reporting, requirements for these vents under 40 CFR Part 63 Subpart FFFF.

- 8. Zeon's individual MON MACT batch process vents form the collective batch process vent for which the collective uncontrolled organic HAP emissions from all of the batch process vents are less than 10,000 lbs/yr at an existing source, and is consequently, by the definition in 40 CFR 63.2550, a Group 2 Batch Process Vent. Per Table 2 to 40 CFR Part 63 Subpart FFFF, Group 2 Batch Process Vents are not subject to any emission limits and work practice standards, or to any control requirements, under the MON MACT. Therefore, the Thermal Catalytic Oxidizer (TCO) that controls Zeon's individual MON MACT batch process vent is not a MON MACT-required control device.
- 9. Only one of Polymerizer No. 37 (E-PLY-PLY-37) or Polymerizer No. 38 (E-PLY-PLY-38) is used for any one recipe grade batch charging cycle.
- 10. Zeon's Polymerizer Nos. 37 and 38 each have both MON MACT Group 2 process wastewater (resulting from routine cleaning operations occurring as part of the batch operations) and maintenance wastewater (resulting from cleaning operations related to maintenance activities). Note, per the definition of *Maintenance wastewater* in 40 CFR 63.2550, wastewater from routine cleaning operations occurring as part of batch operations is not considered maintenance wastewater. The wastewater Point of Determination, or POD, for both the process and maintenance wastewaters, is E-PLY-PLY-37 and E-PLY-PLY-38.
- 11. Per 40 CFR 63.2525(j) and Table 12 to 40 CFR Part 63 Subpart FFFF, the Start-Up, Shutdown and Malfunction Plan (SSMP) requirements of 40 CFR 63.6(e)(3) apply, except Group 2 emission points are not required to be included unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment. Zeon does not use emissions averaging; all of Zeon's emission points are Group 2; and there are no required control devices for equipment leaks. Therefore, Zeon's MON MACT SSMP is required, per 40 CFR 63.105(d), to include the procedures described in 40 CFR 63.105(b) and (c), and a record of the information required by 40 CFR 63.105(b) and (c) is to be maintained as part of the SSMP per 40 CFR 63.105(e). That is, Zeon's MON MACT SSMP is only required to address MON MACT maintenance wastewater. The individual recipes for each grade of material produced address these procedures, and these individual recipes therefore collectively constitute Zeon's SSMP for the MON MACT.
- 12. Non-Applicable Recordkeeping Requirements. The following 40 CFR Part 63 Subpart FFFF recordkeeping requirements of 40 CFR 63.2525 are not applicable to Zeon (non-applicability basis): 40 CFR 63.2525(b)(3), (4), (5) and (6) for control requirements, control devices and monitoring requirements (Zeon has no MON MACT-required control devices and none of the specified monitoring requirements); 40 CFR 63.2525(c) for a schedule or log of operating scenarios for processes with batch vents from batch operations (Zeon has one MCPU operating scenario, as defined by the highest HAP recipe grade; a new recipe grade is introduced if this highest HAP recipe grade is exceeded, which then becomes the new operating scenario); 40 CFR 63.2525(d) for Group 1 Batch Process Vents (Zeon has no Group 1 Batch Process Vents); 40 CFR

63.2525(e)(1), (2) and (3) (Zeon's MCPU processes HAP; control of Zeon's batch process vents is not required; and the NOCS documented the collective uncontrolled organic HAP emissions from all of the batch process vents are less than 10,000 lb/yr); 40 CFR 63.2525(g) for continuous parameter monitoring systems, or CPMS (no CPMS is required for Zeon under 40 CFR Part 63 Subpart FFFF); 40 CFR 63.2525(h) for CEMS (no CEMS is required for Zeon under 40 CFR Part 63 Subpart FFFF); 40 CFR 63.2525(i) for PUG (Process Unit Groups) (Zeon has not elected to develop and comply with the requirements for PUG in accordance with 40 CFR 63.2535(l)); and 40 CFR 63.2525(k) for bag leak detectors used for PM HAP emissions monitoring (Zeon has no PM HAP emissions subject to emissions monitoring under 40 CFR Part 63 Subpart FFFF).

- 13. The records required in 40 CFR 63.2525(b) of each batch operating scenario as specified in 40 CFR 63.2525(b)(1) through (8) are addressed in the MON MACT NOCS Report. (See Comment 14)
- 14. Zeon submitted the original Notification of Compliance Status (NOCS) Report required by 40 CFR 63.2520(d) for its MON MACT MCPU (Miscellaneous Organic Chemical Manufacturing Process Unit) on October 7, 2008. This NOCS Report included both non-LDAR and LDAR (equipment leak) information
- 15. Zeon submitted its first MON MACT Compliance Report for the time period of May 10, 2008 (MON MACT existing affected source final compliance date) through December 31, 2008 on February 27, 2009 in accordance with 40 CFR 63.2520(b)(1).
- 16. Zeon has elected to maintain records of the daily 365-day rolling summation of the number of actual batches, calculated no less frequently than monthly, as an alternative to the daily 365-day rolling summation of HAP emissions, calculated no less frequently than monthly. The number of actual batches correlates to the emissions, and is used as an alternative, or surrogate, parameter for organic HAP emissions as allowed by 40 CFR 63.2525(e)(4)(iv). The number of batches based on the highest-HAP recipe grade being produced in the MCPU 24 hrs/day, 7 days/wk and 52 wks/yr is used as the threshold corresponding to the less than 10,000 lbs/yr uncontrolled organic HAP emissions threshold for a Group 2 Batch Process Vent, with actual organic HAP emissions to be determined for compliance purposes if this number approaches the batch threshold.
- 17. The Group 2 process wastewater recordkeeping requirements specified in 40 CFR 63.146(b)(1) and 40 CFR 63.147(b)(8), as referenced by 40 CFR 63.132(a)(3), and 40 CFR 63.2485(a) and Table 7 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2485(b) through (o), are addressed in the NOCS Report. (See Comment 14)
- 18. Non-Applicable Compliance Report Requirements. The following 40 CFR Part 63 Subpart FFFF Compliance Report requirements of 40 CFR 63.2520(e) are not applicable to Zeon (non-applicability basis): 40 CFR 63.2520(e)(5)(iii) for use of a CMS to comply with an emission limit or operating limit (Zeon is not required to use a CMS for compliance with 40 CFR Part 63 Subpart FFFF); 40 CFR 63.2520(e)(5)(iv) for NOCS Report documentation (Zeon's October 7, 2008 NOCS Report did not contain the specified documentation); 40 CFR 63.2520(e)(6) for use of a CEMS (Zeon is not required to use a CEMS for compliance with 40 CFR Part 63 Subpart FFFF); 40 CFR 63.2520(e)(8) for records relating to a Process Unit Group, or PUG (Zeon has no MON MACT PUG); 40 CFR 63.2520(e)(10)(ii)(A) for reporting changes to Precompliance

Report information (Zeon was not required to submit a Precompliance Report per 40 CFR 63.2520(c)); and 63.2520(e)(10)(ii)(B) for change in a control device status (Zeon has no MON MACT-required control device).

- 19. Zeon has elected to comply with 40 CFR Part 63 Subpart H and the requirements referenced therein, except as specified in 40 CFR 63.2480(b) and (d), as its applicable 40 CFR Part 63 Subpart FFFF equipment leak program. (Table 6 to 40 CFR Part 63 Subpart FFFF as referenced by 40 CFR 63.2480(a)) Under the MON MACT, the non-LDAR and LDAR reporting requirements are semiannually addressed in a single combined Compliance Report. (40 CFR 63.2520(e)(9) of the MON MACT requires the applicable 40 CFR Part 63 Subpart H records and information for Periodic Reports to be included in the MON MACT Compliance Report required by 40 CFR 63.2520(e).)
- 20. MACT Non-LDAR Compliance Report Submittal Dates:

Report Description: 1st Semiannual MON MACT Compliance Report

1<sup>st</sup> Semiannual Non-LDAR (and LDAR) (See Comment 19)

Report Period: January 1 through June 30

Report Due Date: August 31

Report Description: 2<sup>nd</sup> Semiannual MON MACT Compliance Report

2<sup>nd</sup> Semiannual Non-LDAR (and LDAR) (See Comment 19)

Report Period: July 1 through December 31

Report Due Date: February 28

21. The following table outlines what HAP-containing raw material is predominantly associated with each MACT standard applicable to Emission Points listed in Emission Unit U-ZN.

MACT Standard	HAP-Containing Raw Material Monomer(s) Predominantly Associated with MACT Standard for MACT Assignment Purposes
40 CFR Part 63 Subpart U	Acrylonitrile and 1,3-Butadiene
40 CFR Part 63 Subpart JJJ	Styrene
40 CFR Part 63 Subpart FFFF	Ethyl Acrylate

# Appendix E: 40 CFR Part 63 Subpart ZZZZ

#### S1. Standards (Regulation 2.16, Section 4.1.1)

a. HAP (40 CFR Part 63 Subpart ZZZZ - Stationary RICE)

Emission Point E-MSC-EMGEN001 is subject to 40 CFR Part 63 Subpart ZZZZ; however, there are no HAP Standards. (See Comment 1 and Comment 2)

#### S2. Monitoring and Record Keeping (Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2)

a. HAP (40 CFR Part 63 Subpart ZZZZ - Stationary RICE)

Emission Point E-MSC-EMGEN001 is subject to 40 CFR Part 63 Subpart ZZZZ; however, there are no applicable Monitoring or Record Keeping Requirements. (See Comment 1 and Comment 2)

#### S3. Reporting (Regulation 2.16, Section 4.1.9.3)

a. HAP (40 CFR Part 63 Subpart ZZZZ - Stationary RICE)

Emission Point E-MSC-EMGEN001 is subject to 40 CFR Part 63 Subpart ZZZZ; however, there are no applicable Reporting Requirements. (See Comment 1 and Comment 2)

#### Appendix E Comments: 40 CFR Part 63 Subpart ZZZZ

1. This operation is subject to 40 CFR Part 63 Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, because it involves a new stationary reciprocating internal combustion engine (RICE) located at a major source of HAP emissions. (The emergency generator is powered by a new stationary RICE with a power rating of 757 brake horsepower, and Zeon is a major source of HAP emissions.) The new stationary RICE meets the definition in 40 CFR 63.6675 of an emergency stationary RICE, which, per 40 CFR 63.6590(b)(1), does not have to meet the requirements of 40 CFR Part 63 Subpart ZZZZ and of 40 CFR Part 63 Subpart A except for the initial notification requirements of 40 CFR 63.6645(f).

2. The initial notification required by 40 CFR 63.6645(f), as referenced by 40 CFR 63.6590(b)(1), must be, per 40 CFR 63.6645(c), submitted not later than 120 days after becoming subject to 40 CFR Part 63 Subpart ZZZZ. Zeon submitted the initial notification required by 40 CFR Part 63 Subpart ZZZZ on 09/18/2008. Pursuant to 40 CFR 63.6645(f), the initial notification included the information in 40 CFR 63.9(b)(2)(i) through (v); a statement the stationary RICE has no additional requirements; and an explanation of the basis of the exclusion (Zeon stated that generator set operates exclusively as an emergency stationary RICE).

# Appendix F: 40 CFR Part 63 Subpart H (LDAR)

#### S1. Standards (Regulation 2.16, Section 4.1.1)

- a. HAP (LDAR 40 CFR Part 63 Subpart H) (See Comment 1 and Comment 2)
  - As referenced by 40 CFR 63.502(a), with the exceptions noted in 40 CFR 63.502(b) through 40 CFR 63.502(m), as applicable, for 40 CFR Part 63 Subpart U
  - As referenced by 40 CFR 63.1331(a), with the differences noted in 40 CFR 63.1331(a)(1) through 40 CFR 63.1331(a)(13), as applicable, and the exceptions of 40 CFR 63.1331(b) through 40 CFR 63.1331(c), for 40 CFR Part 63 Subpart JJJ
  - As referenced by 40 CFR 63.2480(a) and Table 6 to 40 CFR Part 63 Subpart FFFF, except as specified in 40 CFR 63.2480(b) and 40 CFR 63.2480(d), as applicable, for 40 CFR Part 63 Subpart FFFF (MON MACT)
  - i. General Standards: (40 CFR 63.162)
    - (1) Compliance with 40 CFR Part 63 Subpart H will be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182, review of performance test results, and by inspections. (40 CFR 63.162(a))
    - (2) An owner or operator may request a determination of alternative means of emission limitation to the requirements of 40 CFR 63.163 through 40 CFR 63.170, and 40 CFR 63.172 through 40 CFR 63.174 as provided in 40 CFR 63.177. (40 CFR 63.162(b)(1))
    - (3) Each piece of equipment in a process unit to which 40 CFR Part 63 Subpart H applies shall be identified such that it can be distinguished readily from equipment that is not subject to 40 CFR Part 63 Subpart H. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, or by designation of process unit boundaries by some form of weatherproof identification. (40 CFR 63.162(c))
    - (4) Equipment that is in vacuum service is excluded from the requirements of 40 CFR Part 63 Subpart H. (40 CFR 63.162(d))
    - (5) Equipment that is in organic hazardous air pollutant service less than 300 hours per calendar year is excluded from the requirements of 40 CFR 63.163 through 40 CFR 63.174 and 40 CFR 63.178 if it is identified as required in 40 CFR 63.181(j). (40 CFR 63.162(e))
    - (6) When each leak is detected as specified in 40 CFR 63.163 and 40 CFR 63.164; 40 CFR 63.168 and 40 CFR 63.169; and 40 CFR 63.172 through 40 CFR 63.174, the following requirements apply. (40 CFR 63.162(f))

(a) Clearly identify the leaking equipment. (40 CFR 63.162(f)(1))

- (b) The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 40 CFR 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the owner or operator elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring. (40 CFR 63.162(f)(2))
- (c) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to the provisions of 40 CFR 63.174(c)(1)(i), may be removed after it is repaired. (40 CFR 63.162(f)(3))
- (7) All terms in 40 CFR Part 63 Subpart H that define a period of time for completion of required tasks (*e.g.*, weekly, monthly, quarterly, or annual), refer to the standard calendar periods unless specified otherwise in the section or subsection that imposes the requirement. However, if the initial compliance date does not coincide with the beginning of the standard calendar period, an owner or operator may elect to utilize a period beginning on the compliance date, or may elect to comply in accordance with the provisions of 40 CFR 63.162(g)(2) or (g)(3). (40 CFR 63.162(g))
- (8) In all cases where the provisions of 40 CFR Part 63 Subpart H require an owner or operator to repair leaks by a specified time after the leak is detected, it is a violation of 40 CFR Part 63 Subpart H to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation of 40 CFR Part 63 Subpart H. However, if the repairs are unsuccessful, a leak is detected and the owner or operator shall take further action as required by applicable provisions of 40 CFR Part 63 Subpart H. (40 CFR 63.162(h))
- ii. For pumps in light liquid service: (40 CFR 63.163)
  - (1) The instrument reading, as determined by the method as specified in 40 CFR 63.180(b) and (c), that defines a leak in Phase III, is an instrument reading of 5,000 parts per million or greater above background level for pumps handling polymerizing monomers and 1,000 parts per million or greater above background level for all other pumps. (40 CFR 63.163(b)(2)(iii)(A) and (C))
    - (a) For pumps in Phase III to which a 1,000 parts per million leak definition applies, repair is not required unless an

instrument reading of 2,000 parts per million or greater is detected. (40 CFR 63.163(c)(3)) (See Comment 3)

- (2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. (40 CFR 63.163(b)(3))
- (3) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 63.163(a) through (d), provided the requirements of 40 CFR 63.163(e)(1) through (e)(6) are met. (40 CFR 63.163(e))
- (4) Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of 40 CFR 63.163(a) through (c). (40 CFR 63.163(f)) (See Comment 4)

#### iii. For compressors: (40 CFR 63.164)

- (1) Any compressor that is designated, as described in 40 CFR 63.181(b)(2)(ii), to operate with an instrument reading of less than 500 parts per million above background, is exempt from the requirements of 40 CFR 63.164(a) through (h) if the compressor: (40 CFR 63.164(i)) (See Comment 5)
  - (a) Is demonstrated to be operating with an instrument reading of less than 500 parts per million above background, as measured by the method specified in 40 CFR 63.180(c); and (40 CFR 63.164(i)(1))
  - (b) Is tested for compliance with 40 CFR 63.164(i)(1) initially upon designation, annually, and at other times requested by the Administrator. (40 CFR 63.164(i)(2))
- iv. For pressure relief devices in gas/vapor service: (40 CFR 63.165)
  - (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of 40 CFR 63.165(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 63.165(d)(2). (40 CFR 63.165(d)(1)) (See Comment 6)
  - (2) After each pressure release, a rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. (40 CFR 63.165(d)(2))
- v. For sampling connection systems: (40 CFR 63.166)
  - (1) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Gases displaced during filling of the sample container are not required to be collected or captured. (40 CFR 63.166(a))

(2) Each closed-purge, closed-loop, or closed-vent system as required in 40 CFR 63.166(a) shall: (40 CFR 63.166(b))

- (a) Return the purged process fluid directly to the process line; or (40 CFR 63.166(b)(1))
- (b) Collect and recycle the purged process fluid to a process; or (40 CFR 63.166(b)(2))
- (c) Be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of 40 CFR 63.172; or (40 CFR 63.166(b)(3))
- (d) Collect, store, and transport the purged process fluid to a system or facility identified in 40 CFR 63.166(b)(4)(i), (ii), or (iii). (40 CFR 63.166(b)(4))
- (3) In-situ sampling systems and sampling systems without purges are exempt from the requirements of 40 CFR 63.166(a) and (b). (40 CFR 63.166(c)) (See Comment 7)
- vi. For open ended valves or lines: (40 CFR 63.167)
  - (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). (40 CFR 63.167(a)(1))
  - (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. (40 CFR 63.167(a)(2))
  - (3) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. (40 CFR 63.167(b))
  - (4) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR 63.167(a) at all other times. (40 CFR 63.167(c))
  - (5) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 63.167(a), (b) and (c). (40 CFR 63.167(d))
  - (6) Open-ended valves or lines containing materials which would autocatalytically polymerize or, would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 63.167(a) through (c) are exempt from the requirements of 40 CFR 63.167(a) through (c). (40 CFR 63.167(e))
- vii. For valves in gas/vapor service and in light liquid service: (40 CFR 63.168)

(1) For valves that are either in gas/vapor service or in light liquid service: The instrument reading that defines a leak in each phase of the standard is, for Phase III, an instrument reading of 500 parts per million or greater above background level, as specified in 40 CFR 63.180(b) and (c). (40 CFR 63.168(b)(2)(iii)) (See Comment 3)

- (2) The owner or operator of a source subject to 40 CFR Part 63 Subpart H may elect to meet the requirements of a later phase during the time period specified for an earlier phase. (40 CFR 63.167(a)(2))
- viii. For instrumentation systems: (40 CFR 63.169) (See Comment 8)
  - (1) Evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in 40 CFR 63.169(c) and (d), it is not necessary to monitor the system for leaks by the method specified in 40 CFR 63.180(b) and (c). (40 CFR 63.169(a))
  - (2) If an instrument reading of 500 parts per million or greater above background level, as specified in 40 CFR 63.180(b) and (c), is measured when monitoring instrumentation systems, then a leak is detected. (40 CFR 63.169(b))
- ix. For pressure relief devices in liquid service: (40 CFR 63.169) (See Comment 8)
  - (1) Evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in 40 CFR 63.169(c) and (d), it is not necessary to monitor the system for leaks by the method specified in 40 CFR 63.180(b) and (c). (40 CFR 63.169(a))
  - (2) If an instrument reading of 500 parts per million or greater above background level, as specified in 40 CFR 63.180(b) and (c), is measured when monitoring pressure relief devices in liquid service, then a leak is detected. (40 CFR 63.169(b))
- x. For agitators in gas/vapor service and in light liquid service: (40 CFR 63.173)
  - (1) An instrument reading of 10,000 parts per million or greater above background level, as specified in 40 CFR 63.180(b) and (c), indicates a leak is detected. (40 CFR 63.173(a)(2))
  - (2) Indications of liquids dripping from the agitator during the visual inspection each calendar week indicates a leak is detected. (40 CFR 63.173(b)(2))
  - (3) Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 63.173(a), provided the requirements specified in 40 CFR 63.173(d)(1) through (d)(6) are met. (40 CFR 63.173(d))

xi. For connectors in gas/vapor service and in light liquid service: (40 CFR 63.174)

- (1) An instrument reading of 500 parts per million or greater above background level, as specified in 40 CFR 63.180(b) and 40 CFR 63.180(c), indicates a leak is detected. (40 CFR 63.174(a)(2))
- xii. Delay of Repair: (40 CFR 63.171)
  - (1) Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur by the end of the next process unit shutdown. (40 CFR 63.171(a))
  - (2) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in organic HAP service. (40 CFR 63.171(b))
  - (3) Delay of repair for valves, connectors, and agitators is also allowed if: (40 CFR 63.171(c))
    - (a) The owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and (40 CFR 63.171(c)(1))
    - (b) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 63.172. (40 CFR 63.171(c)(2))
  - (4) Delay of repair for pumps is also allowed if: (40 CFR 63.171(d))
    - (a) Repair requires replacing the existing seal design with a new system that the owner or operator has determined under the provisions of 40 CFR 63.176(d) will provide better performance or: (40 CFR 63.171(d)(1))
      - (i) A dual mechanical seal system that meets the requirements of 40 CFR 63.163(e), (40 CFR 63.171(d)(1)(i))
      - (ii) A pump that meets the requirements of 40 CFR 63.163(f), or (40 CFR 63.171(d)(1)(ii))
      - (iii) A closed-vent system and control device that meets the requirements of 40 CFR 63.163(g); and (40 CFR 63.171(d)(1)(iii))
    - (b) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected. (40 CFR 63.171(d)(2))
  - (5) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond

the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown. (40 CFR 63.171(e))

#### xiii. 40 CFR Part 63 Subpart U:

- (1) Adding emission points or making process changes to existing affected sources: The provisions of 40 CFR 63.480(i)(2)(i) through (i)(2)(ii) apply to owners or operators that add emission points or make process changes to an existing affected source. (40 CFR 63.480(i)(2))
  - (a) If any components are replaced at an existing affected source such that the criteria specified in 40 CFR 63.480(i)(2)(i)(A) through (i)(2)(i)(B) are met, the entire affected source shall be a new affected source and shall comply with the requirements for a new affected source upon initial start-up or by June 19, 2000, whichever is later. (40 CFR 63.480(i)(2)(i))
    - (i) The replacement of components meets the definition of reconstruction in 40 CFR 63.482(b); and (40 CFR 63.480(i)(2)(i)(A))
    - (ii) Such reconstruction commenced after June 12, 1995. (40 CFR 63.480(i)(2)(i)(B))
  - If any components are replaced at an existing affected (b) source such that the criteria specified in 40 CFR 63.480(i)(2)(i)(A) and (i)(2)(i)(B) are not met and that replacement of components creates one or more emission points (i.e., either newly created Group 1 emission points or emission points that change from Group 2 to Group 1) or causes any other emission point to be added (i.e., Group 2 emission points, back-end process operations subject to 40 CFR 63.493 and 40 CFR 63.500, and heat exchange systems and equipment leak components subject to 40 CFR 63.502), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance by 120 days after the date of initial start-up or by the appropriate compliance date specified in 40 CFR 63.481 (i.e., July 31, 1997 for most equipment leak components subject to 40 CFR 63.502, and June 19, 2001 for emission points other than equipment leaks), whichever is later. (40 CFR 63.480(i)(2)(ii))
  - (c) If an addition or process change (not including a process change that solely replaces components) is made that creates one or more Group 1 emission points (*i.e.*, either newly created Group 1 emission points or emission points that change group status from Group 2 to Group 1) or causes any other emission point to be added (*i.e.*, Group 2

emission points, back-end process operations subject to 40 CFR 63.493 through 40 CFR 63.500, and heat exchange systems and equipment leak components subject to 40 CFR 63.502), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance by 120 days after the date of initial start-up or by the appropriate compliance date specified in 40 CFR 63.481 (*i.e.*, July 31, 1997 for most equipment leak components subject to 40 CFR 63.502, and June 19, 2001 for emission points other than equipment leaks), whichever is later. (40 CFR 63.480(i)(2)(iii))

- (2) During periods of non-operation of the affected source or any part thereof, the emission limitations set forth in 40 CFR Part 63 Subpart H, as referred to in 40 CFR 63.502, shall apply at all times, except during periods of non-operation of the affected source (or specific portion thereof) in which the lines are drained and depressurized, resulting in cessation of the emissions to which 40 CFR 63.502 applies. (40 CFR 63.480(j)(2))
- (3) At all times, each owner or operator must operate and maintain any affected source subject to the requirements of 40 CFR Part 63 Subpart U, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.483(a))

## xiv. 40 CFR Part 63 Subpart JJJ:

- (1) Adding emission points or making process changes to existing affected sources: The provisions of 40 CFR 63.1310(i)(2)(i) through (i)(2)(ii) apply to owners or operators that add emission points or make process changes to an existing affected source. (40 CFR 63.1310(i)(2))
  - (a) If any components are replaced at an existing affected source such that the criteria specified in 40 CFR 63.1310(i)(2)(i)(A) through (i)(2)(i)(B) are met, the entire affected source shall be a new affected source and shall comply with the requirements for a new affected source upon initial start-up or by June 19, 2000, whichever is later. (40 CFR 63.1310(i)(2)(i))

(i) The replacement of components meets the definition of reconstruction in 40 CFR 63.1312(b); and (40 CFR 63.1310(i)(2)(i)(A))

- (ii) Such reconstruction commenced after March 29, 1995. (40 CFR 63.1310(i)(2)(i)(B))
- If any components are replaced at an existing affected (b) source such that the criteria specified in 40 CFR 63.1310(i)(2)(i)(A) through (i)(2)(i)(B) are not met and that replacement of components creates one or more Group 1 emission points (i.e., either newly created Group 1 emission points or emission points that change from Group 2 to Group 1) or causes any other emission point to be added (i.e., Group 2 emission points, equipment leak components subject to 40 CFR 63.1331, continuous process vents subject to 40 CFR 63.1316 through 40 CFR 63.1320, and heat exchange systems subject to 40 CFR 63.1328), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance by 120 days after the date of initial start-up or by the appropriate compliance date specified in 40 CFR 63.1311 (i.e., February 27, 1998 for most equipment leak components subject to 40 CFR 63.1331, and June 19, 2001 for emission points other than equipment leaks), whichever is later. (40 CFR 63.1310(i)(2)(ii))
- (c) If an addition or process change (not including a process change that solely replaces components) is made to an existing affected source that creates one or more Group 1 emission points (i.e., either newly created Group 1 emission points or emission points that change group status from Group 2 to Group 1) or causes any other emission point to be added (i.e., Group 2 emission points, equipment leak components subject to 40 CFR 63.1331, continuous process vents subject to 40 CFR 63.1316 through 40 CFR 63.1320, and heat exchange systems subject to 40 CFR 63.1328), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance by 120 days after the date of initial start-up or by the appropriate compliance date specified in 40 CFR 63.1311 (i.e., February 27, 1998 for most equipment leak components subject to 40 CFR 63.1331, and June 19, 2001 for most emission points other than equipment leaks), whichever is later. (40 CFR 63.1310(i)(2)(iii))
- (2) The emission limitations set forth in 40 CFR Part 63 Subpart H, as referred to in 40 CFR 63.1331, shall apply at all times, except during periods of non-operation of the affected source (or specific

portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which 40 CFR 63.1331 applies, or during periods of start-up, shutdown, malfunction, or process unit shutdown (as defined in 40 CFR 63.161). (40 CFR 63.1310(j)(2))

# xv. 40 CFR Part 63 Subpart FFFF:

- (1) If you comply with 40 CFR Part 63 Subpart H, you may elect to comply with the provisions in 40 CFR 63.2480(b)(3) through 40 CFR 63.2480(b)(5) as an alternative to the referenced provisions in 40 CFR Part 63 Subpart H. (40 CFR 63.2480(b))
  - (a) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under 40 CFR 63.181(b)(1)(i). (40 CFR 63.2480(b)(3))
  - (b) For connectors in gas/vapor and light liquid service at an existing source, you may elect to comply with the requirements in 40 CFR 63.169 for connectors in heavy liquid service, including all associated recordkeeping and reporting requirements, rather than the requirements of 40 CFR 63.174. (40 CFR 63.2480(b)(4))
  - (c) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 parts per million (ppm) or greater as an alternative to the values specified in 40 CFR 63.163(b)(2). (40 CFR 63.2480(b)(5))

#### S2. Monitoring and Record Keeping (Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2)

#### a. HAP (LDAR 40 CFR Part 63 Subpart H) (See Comment 1 and Comment 2)

- i. For pumps in light liquid service: (40 CFR 63.163)
  - (1) The owner or operator of a process unit subject to 40 CFR Part 63 Subpart H shall monitor each pump monthly to detect leaks by the method specified in 40 CFR 63.180(b) and (c), and shall comply with the requirements of 40 CFR 63.163(a) through (d), except as provided in 40 CFR 63.162(b) and 40 CFR 63.163(e) through (j). (40 CFR 63.163(b)(1))
  - (2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. (40 CFR 63.163(b)(3))
  - (3) When a leak is detected: (40 CFR 63.163(c))
    - (a) It shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in

40 CFR 63.163(c)(3) or 40 CFR 63.171. (40 CFR 63.163(c)(1))

- (b) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable: (40 CFR 63.163(c)(2))
  - (i) Tightening of packing gland nuts. (40 CFR 63.163(c)(2)(i))
  - (ii) Ensuring that the seal flush is operating at design pressure and temperature. (40 CFR 63.163(c)(2)(ii))
- (c) For pumps in Phase III to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected. (40 CFR 63.163(c)(3))
- (4) Percent leaking pumps: (40 CFR 63.163(d))
  - (a) The owner or operator shall decide no later than the first monitoring period whether to calculate percent leaking pumps on a process unit basis or on a source-wide basis. Once the owner or operator has decided, all subsequent percent calculations shall be made on the same basis. (40 CFR 63.163(d)(1)) (See Comment 9)
  - (b) If, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak, the owner or operator shall implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176. (40 CFR 63.163(d)(2))
  - (c) The number of pumps at a process unit shall be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process unit within 1 month after start-up of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only. (40 CFR 63.163(d)(3))
  - (d) Percent leaking pumps shall be determined by the following equation: (40 CFR 63.163(d)(4))

$$%P_{L} = ((P_{L} - P_{S}) / (P_{T} - P_{S})) \times 100$$

where:

 $%P_L$  = Percent leaking pumps.

 $P_L$  = Number of pumps found leaking as determined through monthly monitoring as required in 40 CFR 63.163(b)(1) and (b)(2).

P<sub>T</sub> = Total pumps in organic HAP service, including those meeting the criteria in 40 CFR 63.163(e) and (f).

- P<sub>S</sub> = Number of pumps leaking within 1 month of start-up during the current monitoring period.
- (5) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 63.163(a) through (d), provided the following requirements are met: (40 CFR 63.163(e))
  - (a) Each dual mechanical seal system is: (40 CFR 63.163(e)(1))
    - (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or (40 CFR 63.163(e)(1)(i))
    - (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or (40 CFR 63.163(e)(1)(ii))
    - (iii) Equipped with a closed-loop system that purges the barrier fluid into a process stream. (40 CFR 63.163(e)(1)(iii))
  - (b) The barrier fluid is not in light liquid service. (40 CFR 63.163(e)(2))
  - (c) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. (40 CFR 63.163(e)(3))
  - (d) Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. (40 CFR 63.163(e)(4))
    - (i) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in 40 CFR 63.180(b) and (c) to determine if there is a leak of organic HAP in the barrier fluid. (40 CFR 63.163(e)(4)(i))
    - (ii) If an instrument reading of 1,000 parts per million or greater above background level is measured, a leak is detected. (40 CFR 63.163(e)(4)(ii))
  - (e) Each sensor as described in 40 CFR 63.163(e)(3) is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site. (40 CFR 63.163(e)(5))

(f) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. (40 CFR 63.163(e)(6)(i))

- (g) If indications of liquids dripping from the pump seal exceed the criteria established in 40 CFR 63.163(e)(6)(i), or if, based on the criteria established in 40 CFR 63.163(e)(6)(i), the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. (40 CFR 63.163(e)(6)(ii))
- (h) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171. (40 CFR 63.163(e)(6)(iii))
- (i) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (40 CFR 63.163(e)(6)(iv))
- (6) Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of 40 CFR 63.163(a) through (c). (40 CFR 63.163(f))
- (7) If more than 90 percent of the pumps at a process unit meet the criteria in either 40 CFR 63.163(e) or (f), the process unit is exempt from the requirements of 40 CFR 63.163(d). (40 CFR 63.163(i))
- (8) Any pump that is designated, as described in 40 CFR 63.181(b)(7)(i), as an unsafe-to-monitor pump is exempt from the requirements of 40 CFR 63.163(b) through (e) if: (40 CFR 63.163(j))
  - (a) The owner or operator of the pump determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (d); and (40 CFR 63.163(j)(1))
  - (b) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. (40 CFR 63.163(j)(2))
- ii. For Compressors: (40 CFR 63.164)

Any compressor that is designated, as described in 40 CFR 63.181(b)(2)(ii), to operate with an instrument reading of less than 500 parts per million above background, is exempt from the requirements of

40 CFR 63.164(a) through 40 CFR 63.164(h) if the compressor: (40 CFR 63.164(i)) (See Comment 5)

- (1) Is demonstrated to be operating with an instrument reading of less than 500 parts per million above background, as measured by the method specified in 40 CFR 63.180(c); and (40 CFR 63.164(i)(1))
- (2) Is tested for compliance with 40 CFR 63.164(i)(1) initially upon designation, annually, and at other times requested by the Administrator. (40 CFR 63.164(i)(2))
- iii. For pressure relief devices in gas/vapor service: (40 CFR 63.165)
  - (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of 40 CFR 63.165(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 63.165(d)(2). (40 CFR 63.165(d)(1)) (See Comment 6)
  - (2) After each pressure release, a rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. (40 CFR 63.165(d)(2))
- iv. For sampling connection systems: (40 CFR 63.166)

There are no LDAR compliance monitoring and record keeping requirements. (See Comment 7)

v. For open-ended valves or lines: (40 CFR 63.167)

There are no LDAR compliance monitoring and record keeping requirements.

- vi. For valves in gas/vapor service and in light liquid service: (40 CFR 63.168)
  - (1) In Phase III, the owner or operator shall monitor valves for leaks at the intervals specified below: (40 CFR 63.168(d))
    - (a) At process units with 2 percent or greater leaking valves, calculated according to 40 CFR 63.168(e), the owner or operator shall either:
      - (i) Monitor each valve once per month; or (40 CFR 63.168(d)(1)(i))
      - (ii) Within the first year after the onset of Phase III, implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175(d) or (e) and monitor quarterly. (40 CFR 63.168(d)(1)(ii))
    - (b) At process units with less than 2 percent leaking valves, the owner or operator shall monitor each valve once each quarter, except as provided in 40 CFR 63.168(d)(3) and (d)(4). (40 CFR 63.168(d)(2))

- (c) At process units with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 quarters. (40 CFR 63.168(d)(3))
- (d) At process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every 4 quarters. (40 CFR 63.168(d)(4))
- (2) Percent leaking valves at a process unit shall be determined by the following equation: (40 CFR 63.168(e)(1))

$$%VL = (VL / (VT + VC)) \times 100$$

where:

%VL = Percent leaking valves as determined through periodic monitoring required in 40 CFR 63.168(b) through (d).

VL = Number of valves found leaking excluding nonrepairables as provided in 40 CFR 63.168(e)(3)(i).

VT = Total valves monitored, in a monitoring period excluding valves monitored as required by 40 CFR 63.168(f)(3).

VC = Optional credit for removed valves =  $0.67 \times \text{net}$  number (*i.e.*, total removed - total added) of valves in organic HAP service removed from process unit after the date set forth in 40 CFR 63.100(k) of 40 CFR Part 63 Subpart F for existing process units, and after the date of initial start-up for new sources. If credits are not taken, then VC = 0.

- (3) For use in determining monitoring frequency, as specified in 40 CFR 63.168(d), the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any three out of four consecutive monitoring periods for annual monitoring programs. (40 CFR 63.168(e)(2))
- (4) Nonrepairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with 40 CFR 63.168(e)(3)(ii). Otherwise, a number of nonrepairable valves (identified and included in the percent leaking calculation in a previous period) up to a maximum of 1 percent of the total number of valves in organic HAP service at a process unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods. (40 CFR 63.168(e)(3)(i))

(5) If the number of non-repairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process unit, the number of nonrepairable valves exceeding 1 percent of the total number of valves in organic HAP service shall be included in the calculation of percent leaking valves. (40 CFR 63.168(e)(3)(ii))

- (6) When a leak is detected: (40 CFR 63.168(f))
  - (a) It shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. (40 CFR 63.168(f)(1))
  - (b) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (40 CFR 63.168(f)(2))
  - (c) When a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair. (40 CFR 63.168(f)(3))
    - (i) The monitoring shall be conducted as specified in 40 CFR 63.180(b) and (c), as appropriate, to determine whether the valve has resumed leaking. (40 CFR 63.168(f)(3)(i))
    - (ii) Periodic monitoring required by 40 CFR 63.168(b) through (d) may be used to satisfy the requirements of 40 CFR 63.168(f)(3), if the timing of the monitoring period coincides with the time specified in 40 CFR 63.168(f)(3). Alternatively, other monitoring may be performed to satisfy the requirements of 40 CFR 63.168(f)(3), regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in 40 CFR 63.168(f)(3). (40 CFR 63.168(f)(3)(ii))
    - (iii) If a leak is detected by monitoring that is conducted pursuant to 40 CFR 63.168(f)(3), the owner or operator shall follow the provisions of 40 CFR 63.168(f)(3)(iii)(A) and (f)(3)(iii)(B), to determine whether that valve must be counted as a leaking valve for purposes of 40 CFR 63.168(e). (40 CFR 63.168(f)(3)(iii))
      - A. If the owner or operator elected to use periodic monitoring required by 40 CFR 63.168(b) through (d) to satisfy the requirements of 40 CFR 63.168(f)(3), then the valve shall be counted as a leaking valve. (40 CFR 63.168(f)(3)(iii)(A))
      - B. If the owner or operator elected to use other monitoring, prior to the periodic monitoring

required by 40 CFR 63.168(b) through (d), to satisfy the requirements of 40 CFR 63.168(f)(3), then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking. (40 CFR 63.168(f)(3)(iii)(B))

- (7) First attempts at repair include, but are not limited to, the following practices where practicable: (40 CFR 63.168(g))
  - (a) Tightening of bonnet bolts, (40 CFR 63.168(g)(1))
  - (b) Replacement of bonnet bolts, (40 CFR 63.168(g)(2))
  - (c) Tightening of packing gland nuts, and (40 CFR 63.168 (g)(3))
  - (d) Injection of lubricant into lubricated packing. (40 CFR 63.168(g)(4))
- (8) Any valve that is designated as an unsafe-to-monitor valve, as described in 40 CFR 63.181(b)(7)(i), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 63.168(b) through (f) if: (40 CFR 63.168(h))
  - (a) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(b) through (d); and (40 CFR 63.168(h)(1))
  - (b) The owner or operator of the valve has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. (40 CFR 63.168(h)(2))
- (9) Any valve that is designated, as described in 40 CFR 63.181(b)(7)(ii), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 63.168(b) through (d) if: (40 CFR 63.168(i))
  - (a) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at any time in a safe manner; (40 CFR 63.168(i)(1))
  - (b) The process unit within which the valve is located is an existing source or the owner or operator designates less than 3 percent of the total number of valves in a new source as difficult-to-monitor; and (40 CFR 63.168(i)(2))
  - (c) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. (40 CFR 63.168(i)(3))

- vii. For instrumentation systems: (40 CFR 63.169)
  - (1) Instrumentation systems shall be monitored within 5 calendar days by the method specified in 40 CFR 63.180(b) and (c) if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in 40 CFR 63.169(c) and (d), it is not necessary to monitor the system for leaks by the method specified in 40 CFR 63.180(b) and (c). (40 CFR 63.169(a))
  - (2) If an instrument reading of 500 parts per million or greater for instrumentation systems is measured, a leak is detected. (40 CFR 63.169(b))
  - (3) When a leak is detected: (40 CFR 63.169(c))
    - (a) It shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171. (40 CFR 63.169(c)(1))
    - (b) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (40 CFR 63.169(c)(2))
    - (c) For equipment identified in 40 CFR 63.169(a) that is not monitored by the method specified in 40 CFR 63.180(b) and (c), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure. (40 CFR 63.169(c)(3))

#### viii. For pressure relief devices in liquid service: (40 CFR 63.169)

- (1) Pressure relief devices in light liquid service shall be monitored within 5 calendar days by the method specified in 40 CFR 63.180(b) and (c) if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in 40 CFR 63.169(c) and (d), it is not necessary to monitor the system for leaks by the method specified in 40 CFR 63.180(b) and (c). (40 CFR 63.169(a))
- (2) If an instrument reading of 500 parts per million or greater for pressure relief devices is measured, a leak is detected. (40 CFR 63.169(b))
- (3) When a leak is detected: (40 CFR 63.169(c))
  - (a) It shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171. (40 CFR 63.169(c)(1))

(b) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (40 CFR 63.169(c)(2))

- (c) For equipment identified in 40 CFR 63.169(a) that is not monitored by the method specified in 40 CFR 63.180(b) and (c), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure. (40 CFR 63.169(c)(3))
- ix. For agitators in gas/vapor service and in light liquid service: (40 CFR 63.173)
  - (1) Each agitator shall be monitored monthly to detect leaks by the methods specified in 40 CFR 63.180(b) and (c), except as provided in 40 CFR 63.162(b). If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected. (40 CFR 63.173(a)(1) and (2))
  - (2) Each agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. (40 CFR 63.173(b)(1) and (2))
  - (3) When a leak is detected: (40 CFR 63.173(c))
    - (a) It shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171. (40 CFR 63.173(c)(1))
    - (b) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (40 CFR 63.173(c)(2))
  - (4) Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 63.173(a), provided the requirements specified in 40 CFR 63.173(d)(1) through (d)(6) are met. (40 CFR 63.173(d))
    - (a) Each dual mechanical seal system is: (40 CFR 63.173(d)(1))
      - (i) Operated with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or (40 CFR 63.173(d)(1)(i))
      - (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or (40 CFR 63.173(d)(1)(ii)

- (iii) Equipped with a closed-loop system that purges the barrier fluid into a process stream. (40 CFR 63.173(d)(1)(iii))
- (b) The barrier fluid is not in light liquid organic HAP service. (40 CFR 63.173(d)(2))
- (c) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. (40 CFR 63.173(d)(3))
- (d) Each agitator is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. (40 CFR 63.173(d)(4))
  - (i) If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the agitator shall be monitored as specified in 40 CFR 63.180(b) and (c) to determine the presence of organic HAP in the barrier fluid. (40 CFR 63.173(d)(4)(i))
  - (ii) If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected. (40 CFR 63.173(d)(4)(ii))
- (e) Each sensor as described in 40 CFR 63.173(d)(3) is observed daily or is equipped with an alarm unless the agitator is located within the boundary of an unmanned plant site. (40 CFR 63.173(d)(5))
- (f) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. (40 CFR 63.173(d)(6)(i))
- (g) If indications of liquids dripping from the agitator seal exceed the criteria established in 40 CFR 63.173(d)(6)(i), or if, based on the criteria established in 40 CFR 63.173(d)(6)(i), the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. (40 CFR 63.173(d)(6)(ii))
- (h) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171. (40 CFR 63.173(d)(6)(iii))
- (i) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (40 CFR 63.173(d)(6)(iv))

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(5) Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from 40 CFR 63.173(a) through (c). (40 CFR 63.173(e))

- (6) Any agitator that is difficult-to-monitor is exempt from the requirements of 40 CFR 63.173(a) through (d) if: (40 CFR 63.173(h))
  - (a) The owner or operator determines that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at any time in a safe manner; (40 CFR 63.173(h)(1))
  - (b) The process unit within which the agitator is located is an existing source or the owner or operator designates less than three percent of the total number of agitators in a new source as difficult-to-monitor; and (40 CFR 63.173(h)(2))
  - (c) The owner or operator follows a written plan that requires monitoring of the agitator at least once per calendar year. (40 CFR 63.173(h)(3))
- (7) Any agitator that is obstructed by equipment or piping that prevents access to the agitator by a monitor probe is exempt from the monitoring requirements of 40 CFR 63.173(a) through (d). (40 CFR 63.173(i)(3))
- (8) Any agitator that is designated, as described in 40 CFR 63.181(b)(7)(i), as an unsafe-to-monitor agitator is exempt from the requirements of 40 CFR 63.173(a) through (d) if: (40 CFR 63.173(j))
  - (a) The owner or operator of the agitator determines that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.173(a) through 63.173(d); and (40 CFR 63.173(j)(1)
  - (b) The owner or operator of the agitator has a written plan that requires monitoring of the agitator as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. (40 CFR 63.173(j)(2)
- x. For connectors in gas/vapor service and in light liquid service: (40 CFR 63.174)
  - (1) For connectors in gas/vapor service and in light liquid service, the owner or operator shall perform all monitoring of connectors at the frequencies specified in the following, except as provided in 40 CFR 63.174(c)(2): (40 CFR 63.174(b)(3))
    - (a) Once per year (*i.e.*, 12-month period), if the percent leaking connectors in the process unit was 0.5 percent or greater

- during the last required annual or biennial monitoring period. (40 CFR 63.174(b)(3)(i))
- (b) Once every 2 years, if the percent leaking connectors was less than 0.5 percent during the last required monitoring period. An owner or operator may comply with 40 CFR 63.174(b)(3)(ii) by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period. (40 CFR 63.174(b)(3)(ii)
- (c) If the owner or operator of a process unit in a biennial leak detection and repair program calculates less than 0.5 percent leaking connectors from the 2-year monitoring period, the owner or operator may monitor the connectors one time every 4 years. An owner or operator may comply with the requirements of 40 CFR 63.174(b)(3)(iii) by monitoring at least 20 percent of the connectors each year until all connectors have been monitored within 4 years. (40 CFR 63.174(b)(3)(iii))
- If a process unit complying with the requirements of 40 (d) CFR 63.174(b) using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, the owner or operator shall increase the monitoring frequency to one time every 2 An owner or operator may comply with the years. requirements of 40 CFR 63.174(b)(3)(iv) by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The owner or operator may again elect to use the provisions of 40 CFR 63.174(b)(3)(iii) when the percent leaking connectors decreases to less than 0.5 percent. (40 CFR 63.174(b)(3)(iv))
- (e) If a process unit complying with requirements of 40 CFR 63.174(b)(3)(iii) using a 4-year monitoring interval program has 1 percent or greater leaking connectors, the owner or operator shall increase the monitoring frequency to one time per year. The owner or operator may again elect to use the provisions of 40 CFR 63.174(b)(3)(iii) when the percent leaking connectors decreases to less than 0.5 percent. (40 CFR 63.174(b)(3)(v))
- (2) The owner or operator may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the owner or operator may not count nonrepairable connectors for the purpose of calculation of the percent leaking connectors in organic hazardous air pollutant service when using the equation specified in 40 CFR 63.174(i)(2) for the second and subsequent

monitoring periods. If the owner or operator selects this option, the owner or operator shall calculate the percent leaking connectors for the second and subsequent monitoring periods by setting the nonrepairable component, C<sub>AN</sub>, in the equation in 40 CFR 63.174(i)(2) to zero for all monitoring periods. alternative, the owner or operator may choose to monitor each connector that has been opened or has otherwise had the seal broken for leaks when it is reconnected or within the first three months after being returned to organic hazardous air pollutant service. If, under this alternative, the monitoring detects a leak, it shall be repaired according to the provisions of 40 CFR 63.174(d), unless it is determined to be nonrepairable, in which case it shall be counted as a nonrepairable connector for the purpose of calculating the percent leaking connectors using the equation in 40 CFR 63.174(i)(2) for the second and all subsequent monitoring The owner or operator may switch between the two alternatives set forth in this Specific Condition at the end of the current monitoring period, provided the switch is reported as required in 40 CFR 63.182, and begin the new alternative in annual monitoring. The initial monitoring in the new alternative shall be completed no later than 12 months after reporting the switch. (40 CFR 63.174(c)(1)(i) through (iii))

- (3) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.174(g) and in 40 CFR 63.171. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (40 CFR 63.174(d))
- (4) Any connector that is designated, as described in 40 CFR 63.181(b)(7)(i), as an unsafe-to-monitor connector is exempt from the requirements of 40 CFR 63.174(a) if: (40 CFR 63.174(f))
  - (a) The owner or operator determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (e); and (40 CFR 63.174(f)(1))
  - (b) The owner or operator has a written plan that requires monitoring of the connector as frequently as practicable during safe to monitor periods, but not more frequently than the periodic schedule otherwise applicable. (40 CFR 63.174(f)(2))
- (5) Any connector that is designated, as described in 40 CFR 63.181(b)(7)(iii), as an unsafe-to-repair connector is exempt from the requirements of 40 CFR 63.174(a), (d), and (e) if: (40 CFR 63.174(g))
  - (a) The owner or operator determines that repair personnel would be exposed to an immediate danger as a

- consequence of complying with 40 CFR 63.174(d); and (40 CFR 63.174(g)(1))
- (b) The connector will be repaired before the end of the next scheduled process unit shutdown. (40 CFR 63.174(g)(2))
- (6) Any connector that is inaccessible or is ceramic or ceramic-lined (*e.g.*, porcelain, glass, or glass-lined), is exempt from the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 40 CFR 63.182. An inaccessible connector is one that is: (40 CFR 63.174(h)(1))
  - (a) Buried; (40 CFR 63.174(h)(1)(i))
  - (b) Insulated in a manner that prevents access to the connector by a monitor probe; (40 CFR 63.174(h)(1)(ii))
  - (c) Obstructed by equipment or piping that prevents access to the connector by a monitor probe; (40 CFR 63.174(h)(1)(iii))
  - (d) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground; (40 CFR 63.174(h)(1)(iv))
  - (e) Inaccessible because it would require elevating the monitoring personnel more than 2 meters above a permanent support surface or would require the erection of scaffold; or (40 CFR 63.174(h)(1)(v))
  - (f) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment. (40 CFR 63.174(h)(1)(vi))
- (7) If any inaccessible or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171 and 40 CFR 63.175(g). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (40 CFR 63.174(h)(2) and (3))
- xi. Recordkeeping requirements: (40 CFR 63.181) (See Comment 10)

The owner or operator shall maintain all applicable records according to the specific non-LDAR HAP record requirements of the individual 40 CFR Part 63 Subparts referencing 40 CFR Part 63 Subpart H. In general, all

records are required to be retained for at least 5 years from the date of creation. Additionally, the owner or operator shall make the records readily available to the District upon request.

- (1) An owner or operator of more than one process unit subject to the provisions of 40 CFR Part 63 Subpart H may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by process unit and the program being implemented (*e.g.*, quarterly monitoring, quality improvement) for each type of equipment. All records and information required by 40 CFR 63.181 shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site. (40 CFR 63.181(a))
- (2) Except as provided in 40 CFR 63.181(e), the following information pertaining to all equipment in each process unit subject to the requirements of 40 CFR 63.162 through 40 CFR 63.174 of 40 CFR Part 63 Subpart H shall be recorded: (40 CFR 63.181(b))
  - (a) A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in 40 CFR 63.174 and instrumentation systems) subject to the requirements of 40 CFR 63 Subpart H. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of 40 CFR Part 63 Subpart H are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by 40 CFR 63.174(b)(1) or (b)(2) (40 CFR 63.181(b)(1)(i))

Per 40 CFR 63.2480(b)(3) of the MON MACT, for an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under 40 CFR 63.181(b)(1)(i).

- (b) A schedule by process unit for monitoring connectors subject to the provisions of 40 CFR 63.174(a) and valves subject to the provisions of 40 CFR 63.168(d). (40 CFR 63.181(b)(1)(ii))
- (c) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of 40 CFR Part 63 Subpart H may be identified on a plant site plan, in log entries, or by other appropriate methods. (40 CFR 63.181(b)(1)(iii))

(d) A list of identification numbers for compressors that the owner or operator elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i). (40 CFR 63.181(b)(2)(ii))

- (e) A list of identification numbers for pressure relief devices subject to the provisions in 40 CFR 63.165(a). (40 CFR 63.181(b)(3)(i))
- (f) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d). (40 CFR 63.181(b)(3)(ii))
- (g) Identification of instrumentation systems subject to the provisions of 40 CFR Part 63 Subpart H. Individual components in an instrumentation system need not be identified. (40 CFR 63.181(b)(4))
- (h) Identification of screwed connectors subject to the requirements of 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded. (40 CFR 63.181(b)(5))
- (i) The following information shall be recorded for each dual mechanical seal system: (40 CFR 63.181(b)(6))
  - (i) Design criteria required in 40 CFR 63.163(e)(6)(i), 40 CFR 63.164(e)(2), and 40 CFR 63.173(d)(6)(i) and an explanation of the design criteria; and (40 CFR 63.181(b)(6)(i)
  - (ii) Any changes to these criteria and the reasons for the changes. (40 CFR 63.181(b)(6)(ii))
- (j) The following information pertaining to all pumps subject to the provisions of 40 CFR 63.163(j), valves subject to the provisions of 40 CFR 63.168(h) and (i), agitators subject to the provisions of 40 CFR 63.173(h) through (j), and connectors subject to the provisions of 40 CFR 63.174(f) and (g) shall be recorded: (40 CFR 63.181(b)(7))
  - (i) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment. (40 CFR 63.181(b)(7)(i))
  - (ii) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment. (40 CFR 63.181(b)(7)(ii))
  - (iii) A list of identification numbers for connectors that are designated as unsafe to repair and an

explanation why the connector is unsafe to repair. (40 CFR 63.181(b)(7)(iii))

- (k) A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used. (40 CFR 63.181(b)(8)(i))
- (l) A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used. (40 CFR 63.181(b)(8)(ii))
- (m) For any leaks detected as specified in 40 CFR 63.163 and 40 CFR 63.164; 40 CFR 63.168 and 40 CFR 63.169; and 40 CFR 63.172 through 40 CFR 63.174, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. (40 CFR 63.181(b)(10))
- (3) For visual inspections of equipment subject to the provisions of 40 CFR Part 63 Subpart H (*e.g.*, 40 CFR 63.163(b)(3), 40 CFR 63.163(e)(4)(i)), the owner or operator shall document that the inspection was conducted and the date of the inspection. The owner or operator shall maintain records as specified in 40 CFR 63.181(d) for leaking equipment identified in this inspection, except as provided in 40 CFR 63.181(e). These records shall be retained for 2 years. (40 CFR 63.181(c)) All required records are to be maintained for a period of 5 years from date of creation, and not for the 2 years cited in 40 CFR 63.181(c).
- (4) When each leak is detected as specified in 40 CFR 63.163 and 40 CFR 63.164; 40 CFR 63.168 and 40 CFR 63.169; and 40 CFR 63.172 through 40 CFR 63.174, the following information shall be recorded and kept for 2 years: (40 CFR 63.181(d)) All required records are to be maintained for a period of 5 years from date of creation, and not for the 2 years cited in 40 CFR 60.181(d).
  - (a) The instrument and the equipment identification number and the operator name, initials, or identification number. (40 CFR 63.181(d)(1)
  - (b) The date the leak was detected and the date of first attempt to repair the leak. (40 CFR 63.181(d)(2))
  - (c) The date of successful repair of the leak. (40 CFR 63.181(d)(3))
  - (d) Maximum instrument reading measured by Method 21 of 40 CFR Part 60, Appendix A after it is successfully repaired or determined to be nonrepairable. (40 CFR 63.181(d)(4))

(e) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. (40 CFR 63.181(d)(5))

- (i) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the Start-Up, Shutdown and Malfunction Plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant Sections of the written procedure. (40 CFR 63.181(d)(5)(i))
- (ii) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion. (40 CFR 63.181(d)(5)(ii))
- (f) Dates of process unit shutdowns that occur while the equipment is unrepaired. (40 CFR 63.181(d)(6))
- (g) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the owner or operator elects to comply with the provisions of 40 CFR 63.174(c)(1)(ii). (40 CFR 63.181(d)(7)(i))
- (h) The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location 40 CFR 63.181(d)(7)(i), then all connectors within the designated location shall be monitored. (40 CFR 63.181(d)(7)(ii))
- (i) Copies of the periodic reports as specified in 40 CFR 63.182(d) of 40 CFR Part 63 Subpart H, if records are not maintained on a computerized database capable of generating summary reports from the records. (40 CFR 63.181(d)(9))
- (5) The dates and results of each compliance test required for compressors subject to the provisions in 40 CFR 63.164(i). The results shall include: (40 CFR 63.181(f)) (See Comment 6 and Comment 10)
  - (a) The background level measured during each compliance test. (40 CFR 63.181(f)(1))

(b) The maximum instrument reading measured at each piece of equipment during each compliance test. (40 CFR 63.181(f)(2))

- (6) Each owner or operator of a process unit subject to the requirements of 40 CFR 63.175 and 40 CFR 63.176 shall maintain the records specified in 40 CFR 63.181(h)(1) through (h)(9) for the period of the quality improvement program for the process unit. (40 CFR 63.181)(h)) (See Comment 2 and Comment 10)
- (7) Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of 40 CFR Part 63 Subpart H under 40 CFR 63.160. (40 CFR 63.181(j)

# S3. Reporting (Regulation 2.16, Section 4.1.9.3)

# a. HAP (LDAR 40 CFR Part 63 Subpart H)

40 CFR Part 63 Subparts U, JJJ, and FFFF, except as noted, are referenced below for LDAR reporting requirements. (See Comment 1, Comment 2, and Comment 13)

The owner or operator of a source subject to 40 CFR Part 63 Subpart H shall submit Periodic Reports. (40 CFR 63.182(d))

- i. Submittal Dates for LDAR (HAP) Reports: (See Comment13)
  - (1) 40 CFR Part 63 Subparts U and JJJ: A report containing the information in 40 CFR 63.182(d)(2), (d)(3), and (d)(4) shall be submitted semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(c). The first periodic report shall cover the first 6 months after the compliance date specified in the individual 40 CFR Part 63 Subpart with 40 CFR Part 63 Subpart H equipment leak requirements. Each subsequent periodic report shall cover the 6 month period following the preceding period. (40 CFR 63.182(d)(1)) (See Comment 11)
  - (2) 40 CFR Part 63 Subpart FFFF: See 40 CFR Part 63 Subpart FFFFF Non-LDAR (HAP) Permit Specific Conditions. (See Comment 12)
- ii. For each process unit complying with the provisions of 40 CFR 63.163 through 40 CFR 63.174 of 40 CFR Part 63 Subpart H, the summary information listed in 40 CFR 63.182(d)(2)(i) through (xvi) for each monitoring period during the 6-month period. (40 CFR 63.182(d)(2)) (See Comment 13)
  - (1) The number of valves for which leaks were detected as described in 40 CFR 63.168(b), the percent leakers, and the total number of valves monitored. (40 CFR 63.182(d)(2)(i))

(2) The number of valves for which leaks were not repaired as required in 40 CFR 63.168(f), identifying the number of those that are determined nonrepairable. (40 CFR 63.182(d)(2)(ii))

- (3) The number of pumps for which leaks were detected as described in 40 CFR 63.163(b), the percent leakers, and the total number of pumps monitored. (40 CFR 63.182(d)(2)(iii))
- (4) The number of pumps for which leaks were not repaired as required in 40 CFR 63.163(c). (40 CFR 63.182(d)(2)(iv))
- (5) The number of compressors for which leaks were detected as described in 40 CFR 63.164(f). (40 CFR 63.182(d)(2)(v))
- (6) The number of compressors for which leaks were not repaired as required in 40 CFR 63.164(g). (40 CFR 63.182(d)(2)(vi))
- (7) The number of agitators for which leaks were detected as described in 40 CFR 63.173(a) and (b). (40 CFR 63.182(d)(2)(vii))
- (8) The number of agitators for which leaks were not repaired as required in 40 CFR 63.173(c). (40 CFR 63.182(d)(2)(viii))
- (9) The number of connectors for which leaks were detected as described in 40 CFR 63.174(a), the percent of connectors leaking, and the total number of connectors monitored. (40 CFR 63.182(d)(2)(ix))
- (10) The number of connectors for which leaks were not repaired as required in 40 CFR 63.174(d), identifying the number of those that are determined nonrepairable. (40 CFR 63.182(d)(2)(xi))
- (11) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible. (40 CFR 63.182(d)(2)(xiii))
- (12) The results of all monitoring to show compliance with 40 CFR 63.164(i) conducted within the semiannual reporting period. (40 CFR 63.182(d)(2)(xiv)) (See Comment 13)
- (13) If applicable, the initiation of a monthly monitoring program under 40 CFR 63.168(d)(1)(i), or a quality improvement program under either 40 CFR 63.175 or 40 CFR 63.176. (40 CFR 63.182(d)(2)(xv)) (See Comment 2)
- (14) If applicable, notification of a change in connector monitoring alternatives as described in 40 CFR 63.174(c)(1). (40 CFR 63.182(d)(2)(xvi))
- iii. The information listed in 40 CFR 63.182(c) for the notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report. (40 CFR 63.182(d)(4)) (See Comment 13)

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## **Appendix F Comments: 40 CFR Part 63 Subpart H (LDAR)**

1. MACT Standards Applicable to Zeon with No Equipment Leak Provisions Required. Zeon has no applicable equipment leak provisions under 40 CFR Part 63 Subpart EEEE (OLD MACT) or under 40 CFR Part 63 Subpart ZZZZ (RICE MACT). The OLD MACT equipment leak requirements of 40 CFR 63.2346(c) only apply to the OLD existing affected source if there is at least one storage tank or transfer rack that meets the applicability criteria for control in Table 2 to 40 CFR Part 63 Subpart EEEE. Zeon's OLD existing affected source does not contain a storage tank or transfer rack that meets this applicability criteria for control, and 40 CFR 63.2346(c) is therefore not applicable to Zeon's OLD affected source.

2. The LDAR (equipment leaks) provisions (Standards, Monitoring and Recordkeeping, and Reporting) of this Renewal Permit only apply to Zeon's subject equipment component types that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of 40 CFR Part 63 Subparts U, JJJ and FFFF (40 CFR 63.160(a)).

#### Notes:

- 1. Zeon has not elected at this time to use pressure testing of batch product process equipment as provided under 40 CFR 63.178(b).
- 2. Zeon has not elected at this time to comply with the quality improvement program for valves, or one of the alternative quality improvement programs for valves, specified in 40 CFR 63.175.
- 3. Zeon has also not been required at this time to implement the quality improvement program for pumps of 40 CFR 63.176.
- 4. Zeon has no required control device for equipment leaks. (There are no closed-vent systems and control devices used by Zeon to comply with the provisions of 40 CFR Part 63 Subpart H, and the requirements of 40 CFR 63.172 are not applicable to Zeon)

However, the quality improvement program for valves, may be elected, as well as any other alternate method of emission limitation specified in 40 CFR 63.177, 40 CFR 63.178 and 40 CFR 63.179, and the change in the method of compliance reported as required by 40 CFR 63.182(d)(xv), if applicable, in the Periodic Report required by the other subparts in 40 CFR Part 63 that reference 40 CFR Part 63 Subpart H.

- 3. All subject pumps in light liquid service, and all subject valves in gas/vapor service and in light liquid service, are in Phase III of the 40 CFR Part 63 Subpart H standards for all subject Subparts of 40 CFR Part 63.
- 4. Pumps that do not have an externally actuated shaft that penetrates the pump housing are known to Zeon as pumps with magnetic drive.
- 5. Zeon's compressors are in one of three categories. The first category consists of compressors that are in organic HAP service but do not operate more than 300 hours per year, and they are exempt from the provisions of 40 CFR Part 63 Subpart H by 40 CFR 63.160(a) and 40 CFR 63.162(e) provided they are identified as required in 40 CFR 63.181(j). The second category consists of vacuum pumps in organic HAP service, which are excluded from the requirements of 40 CFR Part 63 Subpart H by 40 CFR

63.162(d). All remaining compressors are in the third category, which consists of compressors designated to operate with an instrument reading of less than 500 parts per million above background. The first category of compressors are identified as required in 40 CFR 63.181(j) (recordkeeping requirement), and the third category compressors meet the requirements of 40 CFR 63.164(i)(1) and (2), and 40 CFR 63.181(b)(2)(ii) (recordkeeping requirement).

- 6. All Zeon pressure relief devices in gas/vapor service subject to the requirements of 40 CFR Part 63 Subpart H are equipped with a rupture disk upstream of the pressure relief device and are exempt from the requirements of 40 CFR 63.165(a) and (b) by 40 CFR 63.165(d)(1), provided the owner or operator complies with the requirements of 40 CFR 63.165(d)(2).
- 7. In-situ sampling systems and sampling systems without purges are exempt from the equipment leak standards of 40 CFR 63.166(a) and (b), and therefore have no applicable standards under 40 CFR Part 63 Subpart H. Additionally, there are no monitoring and recordkeeping, and no reporting, required for any sampling connection systems allowed under 40 CFR Part 63 Subpart H.
- 8. Zeon has no components in heavy liquid service, as that term is defined in 40 CFR 63.161 of 40 CFR Part 63 Subpart H.
- 9. Zeon calculates percent leaking pumps on a process unit basis. (The 40 CFR Part 63 Subparts U and JJJ subject pumps comprise one unit, and the 40 CFR Part 63 Subpart FFFF subject pumps comprise a second, separate, unit.)
- 10. *Non-Applicable Recordkeeping Requirements*. The following recordkeeping requirements of 40 CFR 63.181 are not applicable to Zeon:
  - a. 40 CFR 63.181(b)(2)(i) and 40 CFR 63.181(g) (Zeon has no closed-vent system and control device used to comply with provisions of 40 CFR Part 63 Subpart H);
  - b. 40 CFR 63.181(b)(2)(iii) (Zeon has no surge control vessels or bottoms receivers);
  - c. 40 CFR 63.181(b)(9)(i), 40 CFR 63.181(b)(9)(ii) and 40 CFR 63.181(d)(8) (Zeon has not elected at this time to monitor batch process units as provided under 40 CFR 63.178(c));
  - d. 40 CFR 63.181(e) (Zeon has not elected at this time to use pressure testing of batch product process equipment as provided under 40 CFR 63.178(b));
  - e. 40 CFR 63.181(f) for pressure relief devices (Zeon has no pressure relief devices in gas/vapor service subject to 40 CFR 63.165(a) and (b) because all subject pressure relief devices are equipped with a rupture disk upstream of the pressure relief device and are exempt from 40 CFR 63.165(a) and (b) by 40 CFR 63.165(d)(1) (See Comment 6));
  - f. 40 CFR 63.181(h) (Zeon is not subject at this time to the requirements of either 40 CFR 63.175 or 40 CFR 63.176 (See Comment 2));
  - g. 40 CFR 63.181(i) (Zeon has no equipment in heavy liquid service (See Comment 8));
  - h. 40 CFR 63.181(k) (Zeon has not elected at this time to comply with the requirements of 40 CFR 63.179 (See Comment 2)).

11. Zeon's LDAR Notification of Compliance Status (NOCS) for 40 CFR Part 63 Subparts U and JJJ was submitted in a letter dated December 29, 1997. An update to this NOCS was submitted by Zeon in a letter dated April 16, 2004.

- 12. Under the MON MACT, the non-LDAR and LDAR reporting requirements are semiannually addressed in a single combined Compliance Report (as opposed to a Periodic Report). (40 CFR 63.2520(e)(9) of the MON MACT requires the applicable 40 CFR Part 63 Subpart H records and information for Periodic Reports to be included in the MON MACT Compliance Report required by 40 CFR 63.2520(e).)
- 13. *Non-Applicable Reporting Requirements*. The following reporting requirements of 40 CFR 63.182(d) are not applicable to Zeon:
  - a. 40 CFR 63.182(d)(2)(xiv) as it pertains to 40 CFR 63.165(a) and 40 CFR 63.172(f), and 40 CFR 63.182(d)(2)(xvii) (Zeon has no pressure relief devices in gas/vapor service subject to 40 CFR 63.165(a) because all subject pressure relief devices are equipped with a rupture disk upstream of the pressure relief device and are exempt from 40 CFR 63.165(a) by 40 CFR 63.165(d)(1) (See Comment 6), and Zeon has no closed-vent systems and control devices subject to 40 CFR 63.172)
  - b. 40 CFR 63.182(d)(3) (Zeon has not elected at this time to use pressure testing of batch product process equipment as provided under 40 CFR 63.178(b); See Comment 2).
- 14. LDAR Reporting Schedules:

40 CFR Part 63 Subparts U and JJJ LDAR Periodic Report Submittal Dates

Report Description: 1<sup>st</sup> Subparts U/JJJ LDAR Periodic Report (Semiannual)

1<sup>st</sup> Semiannual LDAR

Report Period: February 1 through July 31

Report Due Date: September 29

Report Description: 2<sup>nd</sup> Subparts U/JJJ LDAR Periodic Report (Semiannual)

2<sup>nd</sup> Semiannual LDAR

Report Period: August 1 through January 31

Report Due Date: April 1 (The date for leap years is March 31)

# 40 CFR Part 63 Subpart FFFF LDAR Compliance Report Submittal Dates

Report Description: 1st Semiannual MON MACT Compliance Report

1<sup>st</sup> Semiannual LDAR (and Non-LDAR) (See Comment 12)

Report Period: January 1 through June 30

Report Due Date: August 31

Report Description: 2<sup>nd</sup> Semiannual MON MACT Compliance Report

2<sup>nd</sup> Semiannual LDAR (and Non-LDAR) (See Comment 12)

Report Period: July 1 through December 31

Report Due Date: February 28

# **Permit Shield**

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all the conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, Section 4.6.1.

#### **Off-Permit Documents**

There are no off-permit documents associated with this Title V permit.

# **Alternative Operating Scenario**

The source requested no alternative operating scenario in its Title V Application.

## **Insignificant Activities**

Source Wide Insignificant Activities		
Activity	Quantity	Regulatory Basis
Indirect Heat Exchangers less than 10 MM BTU/Hr capacity using only natural gas and not combusting waste oil:  1. C-PLY-MRV-TO Natural Gas Burner (1.5 MMBTU/Hr)  2. C-PLY-TCO Natural Gas Burner (2.2 MMBTU/Hr)  3. C-SDR-2SDRTO Natural Gas Burner (5.1 MMBTU/Hr)	3	Regulation 1.02, Appendix A, Section 1.1
Above-Ground Diesel Fuel Storage Tank (Designated as EB126FST); 300 gallons (approximate); for maintenance activities	1	Tank used exclusively for storage of lubricating oils or fuel oils with a vapor pressure of less than 10 mmHg at conditions of 20°C and 760 mmHg.  Regulation 1.02, Appendix A, Section 3.9.2
Closed-Loop Refrigerated Ethylene Glycol/Water Cooling System (Including Tank TK-127C)	1	APCD Determination (April 2012)
Cooling Tower (Non-Chromium treated water)	1	40 CFR Part 63 Subpart Q (40 CFR 63.400) not applicable to cooling tower – does not use chromium treated water.
Research & Development (R&D) Activities/Facilities	N/A	Regulation 1.02, Appendix A, Section 3.27

Source Wide Insignificant Activities		
Activity	Quantity	Regulatory Basis
Plant NH <sub>3</sub> Refrigeration System consisting of, but not limited to:  a) Approximately 1,800 valves b) Approximately 4,200 flanges c) 6 compressors d) 3 heat exchangers e) 3 condensers f) 2 tanks g) 2 pumps h) 1 separator i) 38 sets of cooling coils in polymerizes	N/A	Regulation 1.06, Section 4.1; Regulation 1.02, Section 1.38.1.2
Miscellaneous drums and totes	< 2,500	Regulation 1.02, Appendix A, Section 2.3.24
Miscellaneous maintenance lubricating oils storage, including 8-compartment storage rack	1	Tanks used exclusively for storage of lubricating oils or fuel oils with a vapor pressure of less than 10 mmHg at conditions of 20°C and 760 mmHg.  Regulation 1.02, Appendix A, Section 3.9.2

Tank Farm (TKF) Insignificant Activities		
Activity	Quantity	Regulatory Basis
Butadiene Monomer Railcar Unloading/Loading Stations: Material is unloaded under pressure with a vapor return hose utilized	3	Closed system with no known underlying applicable regulation.
Butadiene Storage Tank TK-1B (Closed Pressure Vessel with bottom fill and vapor recovery)	1	Exempt from provisions of 40 CFR 63 Subpart U by definition of storage vessel (40 CFR 63.482) Regulation 1.02, Appendix A, Section 3.26
Butadiene Storage Tank TK-2B (Closed Pressure Vessel with bottom fill and vapor recovery)	1	Exempt from provisions of 40 CFR 63 Subpart U by definition of storage vessel (40 CFR 63.482) Regulation 1.02, Appendix A,

Tank Farm (TKF) Insignificant Activities		
Activity	Quantity	Regulatory Basis
		Section 3.26
Butadiene Storage Tank TK-3B (Closed Pressure Vessel with bottom fill and vapor recovery)	1	Exempt from provisions of 40 CFR 63 Subpart U by definition of storage vessel (40 CFR 63.482) Regulation 1.02, Appendix A, Section 3.26
Butadiene Storage Tank TK-4B (Closed Pressure Vessel with bottom fill and vapor recovery)	1	Exempt from provisions of 40 CFR 63 Subpart U by definition of storage vessel (40 CFR 63.482) Regulation 1.02, Appendix A, Section 3.26
300 gallon (approximate) above ground diesel fuel storage tank for firewater back-up pump (Designated as Storage Tank BNTFDST)	1	Regulation 1.02, Appendix A, Section 3.9.2
Emergency Propane generator and 100 gallon (approximate) propane storage tank for chemical additives "refrigerator"	1	EPA White Papers

Polymerization (PLY) Insignificant Activities		
Activity	Quantity	Regulatory Basis
Storage Tank TK-151; 200-gallon capacity (VOC < 250 gallons)	1	Regulation 1.02, Appendix A, Section 2.3.24
Tank TK-103E (A-80 Storage Tank)	1	Part of Operating Scenario required records (40 CFR 63.2525(b)(1)) and MON MACT NOCS (40 CFR 63.2520(d)(2)(iv))
Tank TK-103 (Blend Tank Addition Tank)	1	Part of Operating Scenario required records (40 CFR 63.2525(b)(1)) and MON MACT NOCS (40 CFR 63.2520(d)(2)(iv))
Tank TK-104 (Calibration and Weigh Tank)	1	Part of Operating Scenario required records (40 CFR 63.2525(b)(1)) and MON MACT NOCS (40 CFR 63.2520(d)(2)(iv))

Polymerization (PLY) Insignificant Activities		
Activity	Quantity	Regulatory Basis
Tank TK-106	1	Part of Operating Scenario required records (40 CFR 63.2525(b)(1)) and MON MACT NOCS (40 CFR 63.2520(d)(2)(iv))
Tank TK-107	1	Part of Operating Scenario required records (40 CFR 63.2525(b)(1)) and MON MACT NOCS (40 CFR 63.2520(d)(2)(iv))
Tank TK-18C	1	Part of Operating Scenario required records (40 CFR 63.2525(b)(1)) and MON MACT NOCS (40 CFR 63.2520(d)(2)(iv))
Tank TK-120 (MCF Tank)	1	Part of Operating Scenario required records (40 CFR 63.2525(b)(1)) and MON MACT NOCS (40 CFR 63.2520(d)(2)(iv))
Latex Loading	< 6	Regulation 1.02, Section 1.38.1.2

Pieco (PCO) Insignificant Activities		
Activity	Quantity	Regulatory Basis
Drum Filling Operation	1	Regulation 1.02, Section 1.38.1.2

Spray Drying (SDR) In	significant	Activities
Activity	Quantity	Regulatory Basis
Optional-Use, Safety, In-line Particulate No. 2 Spray Dryer RTO "Guard" filter (located post- C-SDR-2SD and pre-C-SDR-2SDRTO; not a TV particulate control device)	1	Permit 358-08-C; Regulation 1.02, Section 1.38.1.2

Drying (DRY) Insignificant Activities		
Activity	Quantity	Regulatory Basis
Brine Storage Tanks TK-413 and TK-414, and Associated Sodium Chloride Truck Unloading	2 Storage Tanks	Regulation 1.02, Section 1.38.1.2

Pelletizing (PEL) Insi	ignificant A	ctivities
Activity	Quantity	Regulatory Basis
N/A	N/A	N/A

Miscellaneous (MSC) Insignificant Activities		
Activity	Quantity	Regulatory Basis
Internal 785-gallon diesel fuel tank associated with Emergency Diesel Generator EMGEN001 (Title V Emission Point E-MSC-EMGEN001)	1	Tank used exclusively for storage of lubricating oils or fuel oils with a vapor pressure of less than 10 mmHg at conditions of 20°C and 760 mmHg.  Regulation 1.02, Appendix A, Section 3.9.2

Note: Activities identified in District Regulation 1.02, Section 1.38, and Appendix A to Regulation 1.02, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source.

## **Insignificant Activities Comments**

- 1. Insignificant activities identified in District Regulation 1.02 Section 1.38, and Appendix A to Regulation 1.02, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 Section 3.5.4.1.4.
- 2. Activities identified in District Regulation 1.02 Section 1.38, and Appendix A to Regulation 1.02, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source per Regulation 2.16 Section 4.1.9.4.
- 3. The Insignificant Activities Table is correct as of the date the permit was proposed for review by USEPA Region 4.
- 4. The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 Section 4.3.5.3.6.

# **Protocol Checklist for Performance Test**

A com	apleted protocol should include the following information:
	Facility Name, Location, and ID #;
	Responsible Official and Environmental Contact Names;
	Permit #s which are requiring the test to be conducted;
	Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5);
	Alternative test methods or description of modifications to the test methods to be used;
	Purpose of the test including equipment, and pollutant to be tested; the purpose may be
	described in the permit which requires the test to be conducted or may be to show
	compliance with a Federal Regulation or emission standard;
	Tentative test dates (these may change but the District will need final notice at least 10
	days in advance of the actual test dates in order to arrange for observation);
	Maximum rated production capacity of the system;
	Production rate goal to be achieved during the performance test for demonstration of
	compliance;
	Method to be used for determining rate of production during the performance test;
	Method to be used for determining rate of production during subsequent operations of the
	process equipment to demonstrate compliance;
	Description of normal operation cycles;
	Discussion of operating conditions that tend to cause worse case pollution emissions; it is
	specifically important to clarify this if worst case emissions do not come from the
	maximum production rate;
	Process Flow Diagram;
	List the type and manufacturer of the control equipment if any;
	List the Control Equipment (baghouse, scrubber, condenser, etc.) parameter data to be
	monitored and recorded during the performance test; note that these will be used to
	ensure representative operation during subsequent operations; this can include pressure
	drops, flow rates, pH, and temperature; since the parameters achieved during the test may
	be required during subsequent operations describe what pressure drops, etcetera, are
	indicative of good operating performance; and
	Generally describe the proposed test, how it will be conducted, how measurements will
	be taken, and how quality assurance and accuracy of the data will be maintained.

☐ How quality assurance and accuracy of the data will be maintained, including;

- Sample identification and chain-of-custody procedures;
- Are Audit samples required for this test Method (EPA contact number for Audit Samples 919-541-1062) if yes then please make samples available to the District for observation during the stack test;
- Audit Sample Provider;
- o Number of Audit Samples to be used:
- ☐ Pipe, duct, stack, or flue diameter to be tested;
- □ Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet;
- □ Determine number of traverse points to be tested for outlet and additionally for inlet if required using Appendix A-1 to 40 CFR Part 60;
  - Method 1 if stack is >12"
  - o Method 1a if stack is between 4" and 12"
  - Alternate method of determination for <4"</li>
  - o If a sample location at least two stack or duct diameters downstream and half a diameter upstream from any flow disturbance is not available then an alternative procedure is available for determining the acceptability of a measurement location. This procedure described in Section 11.5 allows for the determination of gas flow angles at the sampling points and comparison of the measured results with acceptability criteria.

# **End of Document**